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CLINICAL LECTURE.

*CHRONIC INFLAMMATION OF THE UTERUS, WITH POSSIBLE PREGNANCY.**

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GENTLEMEN: The patient I bring before you this morning is a woman, 25 years of age; married at 13; gave birth to a child at 14. She menstruated a few times before her marriage, and enjoyed good health until three years ago. Menses, irregular; the last sickness continued from the 11th of September to the 3d of October. The point to which I wish to direct your attention is her age—13 years when married, gave birth to a child at 14, and, hence, was called upon to perform the highest functions at an age at which these organs are attaining their full development. Is it any wonder that she should suffer from diseased conditions of the pelvic organs? Is it not surprising that she does not suffer from diseases of far greater gravity than that of which she complains? Every individual is certainly better off who is not called upon to perform the highest physical functions at so early an age—at one in which we could not expect such organs to have attained their complete development. The influences of the organ upon the general health of the individual are very marked, so that, as a result of any disturbance that takes place, we shall have an imperfect development, that must affect the general health. The great frequency of uterine and ovarian diseases in our country is, undoubtedly, due to the fact that young girls, at the time at which they are attaining their highest physical development, are kept in school, or practicing on the piano, thus developing the nervous system at the expense of the physical. It is probably due to such a course of education that the great majority of ovarian troubles arise. We find the women who have been most distinguished in their school-work suffer, in after years, from a condition which will continue with them during the remainder of their lives. We have had, in this patient, still greater injury, in the fact that she has been called upon to exercise the highest functions previous to the complete development of the organs. She complains of distress and pain; it is not, however, actual pain she suffers under examination, so much as it is the influence upon her highly nervous condition, which gives rise to the fear that she is about to be hurt; in other words, it is fear from which she suffers. While we are not able to distinguish any enlargement of the pelvic organs by the abdominal palpation, we are enabled to notice, by inspection, a distension of the abdominal walls. In looking over her abdomen, we see the changes which have taken place in the skin; thus, there is a dark line running from the navel to the symphisis. This is a condition which takes place as a result of pregnancy; it is, however, not a pathognomonic symptom, inasmuch as it may occur as a result of other diseased conditions of the uterus, particularly of fibroid growths. The scars you see upon either side are known as striæ, and result from the distension or stretching of the skin of the abdomen. These, too, are not

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necessarily indicative of pregnancy, as they may arise from any abdominal distension, such as fibroid tumors, ovarian growths, obesity, ascites, or any condition which leads to sufficient distension to result in the rupture of the skin-layers. When these striæ are recent, they present a reddish appearance; when the result of former distension, they are white, pearly, or glistening. In an abdominal growth, the inspection of the abdomen enables you to form an idea as to the character of the growth—whether it is symmetrical or irregular, or projecting largely to one side. The discolorations on the skin will indicate the possibility of inflammatory conditions within the pelvis which have led to the application of blisters, or other counter-irritants. The position of the distension will enable you to form an idea as to the particular organ involved, or as to the relation of the abdominal growth to the contents of the cavity. Having carefully inspected the abdomen, we next proceed to obtain a more definite idea as to the character of the possible growth; this is done by placing the hand or hands upon the abdomen, and practicing what is known as palpation. In doing this, it is important to direct the attention of the patient from what is being done, as otherwise, if she is nervous, she will involuntarily contract her muscles, and render it difficult to outline or determine the structures within the cavity. She may complain of pain and distress when it is mere sensitiveness, and the fear of being hurt. The patient may sometimes be directed to breath with the mouth open, and take a deep inspiration, and let it all be expelled; the better way, however, is to place her upon her back, with a pillow under her head, with the limbs drawn up, and then, by directing her attention to other matters, make a careful examination. By this step we are enabled to determine the size of the growth, its regularity, whether it is solid or fluid, its mobility, its relation to the viscera of the abdomen. Another procedure, that in many cases is of great value, is that known as percussion; it is of importance in the investigation of the fluctuating tumors; thus, it may, in some cases, be difficult to determine whether the fluctuation is due to ascites or to an ovarian cyst. In ovarian cyst, unless in single cysts or unilocular cysts, the wave of fluctuation will be short; it is not felt entirely across the abdomen. In ascites, the abdomen is flattened and broadened. In percussion, the point of greatest resonance, or, rather, where the resonance is most distinct, is the summit of the distension, while it is absent around the sides of the abdomen. The line of resonance changes with the position of the patient. The resonance in such cases is due to the fact that the intestines, being filled with gas, float to the surface; in ovarian tumors or cysts, on the other hand, over the summit of the tumor there is dullness upon percussion, while there is resonance in one or the other flank, occurring more particularly in the inguinal region opposite to that in which the tumor began; due to the fact that, as the tumor increases in size, it pushes the intestines upward, and to the opposite side. In these cases, change of position has no influence upon the percussion sound.

Where the abdomen is very greatly distended with ascites, however, there may be a possibility of error in the fact that the mesentery is not sufficiently long to permit the intestine to float up to the surface, and there is a layer of liquid several inches in depth intervening between the wall and intestine. In such cases percussion lightly made will give dullness, while pressing the hand deeply into the abdomen, percussion, dispelling the intervening fluid will give resonance. By auscultating the abdomen, we are enabled to determine peculiar sounds, due to the passage of gas through the intestines, and in cases in which the abdomen is distended by the presence of the tumor, particularly uterine, we may hear what is known as the uterine bruit. This was formerly supposed to be the sound produced by the blood coursing through the placental sinuses, but hearing the same sound in women who are not pregnant, but are suffering from fibroid tumors, it is recognized to be the passage of blood through the uterine sinuses. In women pregnant, by auscultation we may not infrequently hear the fœtal heart-sounds, a symptom which is absolutely indicative of pregnancy and cannot be mistaken for any other. In this individual patient our examination has not disclosed any enlargement of the abdomen other than that which arises from the relaxation of the abdominal walls. Introducing the finger into the vagina, we endeavor to determine not only the position of the uterus, but its condition. We find the vagina is relaxed, without, however, any protrusion of the posterior wall. Introducing the finger farther to the upper part of the vagina, we find the cervix is situated somewhat

posteriorly, and with the posterior surface a distension of the rectum is recognized which is evidently the result of accumulation of fæcal matter. Were we not aware of the sensation produced by such an accumulation, we might suppose at first that it was indicative of the foreign growth in the pelvis. The uterus is considerably enlarged; this enlargement is firm and dense in character and the uterus is rather movable; the fundus of the uterus is also considerably enlarged, with an enlargement of the ovary upon the right side; we are unable to distinguish anything of the kind upon the left. As we have said, we notice that the fundus of the uterus is considerably enlarged. The anteflexion is increased or intensified, producing a more marked anteflexed position. Now, with a patient presenting such symptoms, we have to consider what may be the cause of the conditions present. We have here a woman who had a menstrual flow which continued from September 11th to October 3d, since which time, a period of some six weeks, she has not menstruated. You will ask what diseased conditions will produce this symptom, and associated particularly with an enlarged uterus. There are several diseased states that may exist and give rise to some of these symptoms. In the first place, we may have a fibroid growth in the uterus, a chronic inflammation of the organ which is sometimes known as areolar hyperplasia or sclerosis, or it may be the result of pregnancy. Favorable to the possibility of its being a fibroid growth, we have the fact that fibroids are much more likely to occur in the colored race than in the white. The former enjoy almost an equal immunity against malignant disease. The symptoms of fibroid tumors will be dependent somewhat upon their situation; thus, if they are situated in the wall of the uterus in such a way as to encroach in their further development upon the uterine cavity, they are likely to give rise to hæmorrhage as a marked symptom; if on the external surface, projecting externally, they are noticeable as an irregularity. In this patient we have had the menstrual course disturbed but once by the excessive or prolonged flow; it may be true that this is the first time in which the growth has attained sufficient development upon the mucous surface to have produced hæmorrhage. Under such circumstances, however, we should have expected the next menstrual flow to have also been present and excessive. The uterus, while enlarged, is regular in its outline; there is no indication that a growth has occurred in the uterus. Hence we lack this indication of the presence of the fibroid. It is true that we may have the uterine canal distended by the fibroid tumor, which is not sufficiently large to give the indication by a conjoined examination; we would expect, however, that the growth would have given rise to the disturbance of the menstruation prior to the recent hæmorrhage.

One of the first indications of intra-uterine fibroids is the presence of hæmorrhage occurring either before the menstrual period or during the intervals. So much for the theory of it being a fibroid growth. It should be remembered that ovarian cysts are sometimes a cause for disturbed menstruation, particularly where the ovaries have undergone marked cystic degeneration. Hæmorrhage is a frequent and almost constant symptom. Such cases may be subjected to the dilatation and curetting of the uterus without any influence whatever upon the symptoms. There is, as you remember, enlargement of one ovary here, but it has not been the cause of this condition or we should have had hæmorrhage more frequently occurring. In a woman who has given birth to a child at 14 years of age, and to others subsequently, we would hardly expect that the uterus would resume readily and rapidly its normal position; the organ consequently remains in the state known as subinvolution; this condition becoming chronic, leads to substitution of the fibrous for the muscular tissue, developing what is known as a chronic inflamed uterus, or scleroid organ, or fibroid change, a condition of the uterine walls similar to that which takes place in the fibroid which is maturing. The condition is attended with more or less irregularity of menstruation, sometimes increased, at others decreased flow. The patients suffer also from profound nervous symptoms; symptoms which lead them to believe that they are the victims of organic disease of the stomach, heart, liver, or other organs. The condition is one which not unfrequently follows abortion, and, as I have not before mentioned, this patient suffered from a miscarriage three years ago, which may be an explanation of the fibroid condition now present. That this condition does exist is evident from the hard, dense feel of the fundus of the uterus, which is not characteristic of the

enlargement resulting from pregnancy. The existence of such a condition is not an absolute contra-indication of the occurrence of pregnancy, as, indeed, the changes which take place in such a uterus render the woman more susceptible to the occurrence of pregnancy, while she is less likely to continue until its completion. Such women, then, being susceptible to pregnancy, are likely to abort. The abortion results either from the defective development of the decidua, permitting the ovum to hang from the uterine surface by simple deciduous serotina, forming a polypus, or it arises from the result of the inability of the uterus, from the loss of its muscular tissue, to develop with the increase in size of the ovum. In this patient, then, our diagnosis is sclerosis of the uterus, with the possibility of pregnancy. In the examination of such a patient, you will be particularly careful to do nothing that will be likely to interfere with the possible product developing within the cavity of the uterus; hence, you would not introduce a sound until you had eliminated the possible existence of pregnancy. In a patient presenting herself for examination, if her nervous condition is such that she would be likely to use measures to interfere with the progress of pregnancy, you would postpone a definite diagnosis until a later date, and subject the patient to treatment which will not interfere with the physiological process, and yet will decrease the irritation of the uterus. You will possibly ask what we would suggest as such a course of treatment. It would be, first, to promote the general nutrition of the patient, giving her nourishing food, sufficient amount of out-door exercise, correcting the action of the alimentary canal, and the administration of such remedies as will decrease the irritation of the uterus. Of the latter remedies, probably, the most efficient will be the chlorate of potash; this may be given in 5 to 15 grains, three or four times in the twenty-four hours; the bromide of potash is also an efficient agent where the patient has a highly nervous organization. It may be given in larger doses, and continued over a greater length of time than the chlorate. If you have reason to fear diseased condition of the kidneys of the patient, chlorate of potash will be contra-indicated.

ICE-CREAM has again been recommended as a very good remedy and diet for disease of the stomach.

ORIGINAL COMMUNICATIONS.

ON THE USE OF STRYCHNIA IN DISEASES OF THE SPINAL CORD.

BY L. HARRISON METTLER, A.M., M D.

THE selective action of strychnia upon the spinal cord is so universally known and appreciated that it is not surprising to hear of its frequent use when distinctly contra-indicated. I have seen instances of this, and almost every neurologist can relate cases that have fallen under his care, in which all hope of cure had been relinquished because the patient had tried so many drugs, and among them even strychnia. It is unfortunate that some of the profession adopt and not a few of the text-books teach that strychnia and disease of the spinal cord are as inseparable in therapeutics as quinine and malaria. Not only is this an error, but, what is more, it is positively injurious. The affections of the spinal cord indicating the exhibition of so formidable a drug are exceedingly few; and, not unfrequently when the drug has been administered, a sedative instead of a stimulant was the real requirement. It is wise for us to call a halt from time to time upon so extensive and baneful a practice, and to restate the fact that the proper administration of strychnia for spinal-cord disease, like that of iron for anæmia, demands the highest diagnostic skill on the part of the medical adviser.

There are still many mooted questions in regard to the physiological action of the drug upon the organism as a whole, but some facts in regard to its effects upon the spinal-cord are so well established and so remarkable as to have naturally given rise to its great popularity in the treatment of a special class of diseases. These facts should be well remembered each time the medicament is exhibited. It is quite positive that nux vomica and its alkaloids lessen to a certain degree the oxidizing power of the blood, yet this is not sufficient to account for the singular effects of the alkaloids upon the nervous apparatus. All parts of the nervous system are affected by them, some earlier and more powerfully than others. Schroeder Van der Kolk was the first to note what has since been frequently proved, namely, that in strychnine poisoning there is marked

dilatation of the blood-vessels in the gray matter of the cord, with bloody extravasations. It seems to be the motor elements and reflex centres of the cord that are pre-eminently affected, thus explaining the remarkable similarity between the symptoms of strychnine poisoning and traumatic tetanus. The irritability of the motor nerves is exhausted by overstimulation, while the sensory nerves remain unaffected or are only occasionally exhausted. The tetanic spasms produced by the slightest cutaneous irritants are due to the exalted functional activity of the reflex centres. After destruction of the cord, Magendie found that strychnine poisoning did not produce convulsions, hence proving the agency of the cord in the production of these striking phenomena. Clinical observations, as well as experimentation, demonstrate that the particular agency of the cord consists in the exaltation of the reflex function.

From the clinical stand-point, some of the results observed by Spitzka in chronic poisoning should receive careful attention. He managed to keep frogs alive and tetanized with the drug for forty days. In these cases, disease was established in the cord, "partly as an insular sclerosis, partly as an hæmorrhagic or non-hæmorrhagic myelitis." The symptoms of such a condition are a diminution of the force of the spasms and an ataxic state, with tremors. Strychnine is admitted by many to be a cumulative poison, though Leube and Rosenthal assert that one can become habituated to it by long use.

It affects very slightly the peripheral nerves, and then only when taken in enormous doses. I have thus briefly referred to the well-known physiological actions of strychnine, in order to show the manner and extent of the cord involvement, and the great therapeutical importance of the latter.

From this picture of the experimental effects of strychnia, it is evident that only a small minority of spinal cord lesions can be treated by it; that only in well-defined stages of these lesions can it be advantageously or even safely exhibited, and that at all times its administration should be undertaken only with the greatest caution, while its effects should be closely watched. On general principles, it should be guardedly withheld whenever there is an active, congestive, inflammatory or degenerative process going on within the substance of the cord.

Many of the books recommend the use of strychnia in paralysis. This has, doubtless, been the source of much of its injudicious employment. Paralysis is such a vague term, and may mean so much or so little, that as an indication for treatment it is practically worthless. Paralysis may be motor or sensory in origin; it may be due to lesion of the muscular or nervous tissues; it may be dependent upon an anæmic or hyperæmic state, malnutrition or hypernutrition, active inflammation, or passive degeneration. It is necessary, therefore, to clearly define the existing pathological condition, rather than to regard merely the symptom of paralysis before exhibiting strychnia. I have known of positive harm done by the neglect of this simple precaution.

The paralysis resulting from spinal meningeal lesions is generally caused by compression of the spinal nerve-roots. It is not often that it is absolute, and usually it is more or less localized according to the particular part of the spinal membranes that has been inflamed. Rarely will strychnia ever be required in such cases. The use of medicines to hasten the absorption of the exudative product compressing the nerve-roots, combined with general tonic measures, will afford the better results. The great danger of spinal meningitis in all its stages is secondary involvement of the cord, producing a marginal myelitis or meningo-myelitis. The use of so powerful and stimulating a drug as strychnia while the membranes are thus actively inflamed, will tend to advance the process to the cord. Only when the compressing bands are beginning to recede, as shown by the slow return of motion, should the drug be at all employed, and then only in very minute doses. The purpose is to re-awaken the motor elements of the cord which, by their long severance from the muscles, have practically lain dormant, and to that extent have been functionally weakened. They are not diseased, and are in no need of powerful stimulation. Ofttimes, in such cases, the various preparations of nux vomica itself are better than the alkaloid. The same principle applies to cases of syphiloma of the spinal meninges, and, in fact, any lesion outside of the cord proper which compresses it and for a time interferes with its functional activity. First, remove the compression or its cause, allay all inflammation, and then administer small, tonic doses of the drug, simply to revive the cord's latent

energy. Like electricity, strychnia has been much abused in spinal meningitis; that is my excuse for devoting so much space to what is plain and self-evident.

Paraplegia depending upon acute structural changes within the cord should never be treated with strychnia. Positive harm only will result. In such cases some authors recommend its hypodermatic injection as a means of differentiating between a structural and a functional disease; in the former the symptoms are increased, while in the latter they are usually ameliorated. Such a procedure, I am convinced, is rarely warranted. Other means ought to be sufficient for the purpose. The uncertainty of action of the drug in the functional cases is as unsatisfactory, almost, as the fear of increasing the damage already done in the structural cases.

In the inflammations and degenerations of the cord there is always, at one stage of the process, intense hyperæmia and enlargement of the blood-vessels. This, it will be remembered, is one of the physiological results of the experimental administration of strychnia. Hence, in simple hyperæmia of the cord, it is positively contra-indicated. So true is this that the beneficial effects of the alkaloid in relieving the paraplegia of the caisson disease indicate that this affection cannot be due to a spinal hyperæmia, as Hammond supposed. It must be admitted, however, that we have yet much to learn in regard to the action of strychnia in such severe states as acute inflammation. Jewell administered it in the most active stage of acute myelitis, and claimed that he obtained a decided improvement. Despite Gray's numerous observations, in which he witnessed the very opposite results from those claimed by Jewell, Spitzka has reopened the question by the report of a case of acute anterior poliomyelitis, in which the toxic effects of strychnia were accidentally obtained, with a return of the patellar reflex, general power of motion, and a rapid improvement of all the symptoms. These observations are yet too few to overthrow the more conservative opinion that strychnia, administered during an active inflammation of the cord, does harm.

In the sclerotic affections, few authorities approve of the use of strychnia, except in the smallest doses, for its constitutional tonic effect. This is rational, as one could hardly expect much benefit from a stimulant in a simple wasting process. The tendency would be to hasten the degeneration by exhausting the feeble metabolic powers still possessed by the nervous elements. The experiments by Spitzka here cited show that toxic doses of strychnia produce sclerosis, and when this process has once been instituted in the cord by other causes it may be readily inferred that medicinal doses will tend to increase it. And yet, what a common practice it is to order strychnia indiscriminately in many of these sclerotic affections, locomotor ataxia, multiple sclerosis, lateral sclerosis, disseminated, diffused, and secondary sclerosis!

In long-standing cases of infantile spinal paralysis, strychnia in conjunction with electricity has been of valuable service. According to Pelione, Hammond, and Seeligmüller, its subcutaneous administration has occasionally resulted in a cure, and not infrequently checked the further progress of the disease. The action of the remedy is conceivable in these cases of old paralysis, while the progressive nature of the malady warrants the trial of almost any agent, however powerful or apparently contra-indicated.

If there be any excess of reflex action, if the muscles are not decidedly wasting, or if there are any indications whatever of an active morbid process within the motor elements of the cord, strychnia had better be withheld entirely or administered cautiously in the smallest possible doses. Iron, quinine, arsenic, and the general reconstructives will be much safer agents to employ, and in the majority of cases of spinal-cord disease will afford the most satisfactory improvement. If there are any spastic symptoms of a paraplegic nature the strychnia had better not be exhibited; the symptom is a troublesome one in itself to manage, and strychnia will only be likely to increase the spasms.

There is one disease of the degenerative class in which strychnia seems to be pre-eminently beneficial, and that is progressive muscular atrophy. The hypodermatic method should be employed in its administration, and, though any of its salts may be selected for that purpose, the nitrate is the one most favorably received. Cases of this hopeless and intractable disease have been much improved, and a stop put to the progress of the morbid process.

Certain anæmic and nutritional conditions of the cord might naturally be expected to be benefited by strychnia, from a consideration of the physiological action of the drug on the vasomotor system.

We have thus seen, from this rapid survey, that, instead of being generally useful in spinal paralysis, the conditions of the cord for which strychnia is indicated are few indeed. As a general tonic it is invaluable when given in small doses; but its powers are then exerted upon the whole constitution, improving its tone and metabolism, and thereby secondarily improving the condition of the cord.

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HAS ELECTRICITY ANY ACTION AS A GERMICIDE? CAN IT PRODUCE POISONOUS RESULTS IN FOOD?

BY WM. R. D. BLACKWOOD, M.D.,
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HAS electricity germicidal power?

During the last decade the profession has been exercised terribly over the great germ theory, as explaining all that was before mysterious in demonstrating what causes disease; and we are gravely told that no abnormal action can by any possibility be induced to give us a chance to show our skill in the healing art, unless some of the members of this extensive horde of microscopic pirates will kindly open the way for us. Without giving my own views at present as to whether there is so much in this theory as some ultra-worshippers are inclined to claim, it is sufficient to state that, for the purpose of explanation to the laity, I think that in some instances germs are the cause and in others they are the results of disease. Whatever the real truth is, in this matter, it is abundantly evident that germicides (so called) are getting to be a big thing in our armamentarium against maladies of all kinds and conditions.

Those of my readers who are—fortunately for their patients—well up in the knowledge that electricity is an exceedingly valuable agent for saving the stomach hard work at least, even though it fails in other hands to preserve the anatomical integrity of women more particularly, will agree with me in hoping that its power may be extended; and if, in the proper use of electric energy, we can so far affect these earnest workers as to make them let go the hold they have gotten on our patients, then the great microbe question will have been simplified a great deal, and the impatient patients will be correspondingly benefited at the expense of the druggists, who are getting more than their just share of the honorarium, as ethics exist at present.

At intervals, during some years past, I have heard of something going on in the line now under consideration, but nothing more than desultory references have reached me. Since finishing this paper, which was written in July last, I noticed an article in the Medical and Surgical Reporter, referring to work done by Spilker and Gottstein, of Berlin, who tried the effect of so called "induction" by sending currents around tubes containing cultures principally of the micrococcus prodigiosus; also those of D'Arsonval and Duboise, who tried magnetism; whilst Cohn and Mendelsohn tested galvinism. The results attained by the latter were believed to be due to changes in the fluids produced by electrolysis; but in my own experiments the outcome was purely a germicidal one. There must be some error in this editorial, for the formula of the current is apparently incorrect. It is stated to be 2.5 ampères plus 1.25 volts; this is a very low pressure to drive the current through a coil long enough to do anything in the line of induction. Then, again, the time element is set at twenty-four hours,—greatly beyond anything needed with my work. So, also, currents of from 10 to 12 ampères are said to have been useless, whilst I got decided germicidal results with greatly lower energy; but this may have been due to the fact that I sent the currents always through the tubes direct, not around the outside of them. I have tried this method of "induction" without getting the slightest effect, and it is difficult to see, in my opinion, how any could be had.

A letter received from Dr. William D. Whiting, of New York, in November, 1883, caused me to write a short paper on this matter, I having previously done some experimental work in the search after germicides which would be effectual without doing the patient more harm than good, and in my answer to the doctor, as contained in the MEDICAL BULLETIN for December, 1883, I referred to some of these experiments. Having since that time repeated them sufficiently to be sure of the results, I trust that a few remarks on the subject will not be too tiresome, and I begin by saying that my first experience in germ-study was caused by a desire to jugulate the microbes supposedly hidden in the straw used for bedding by the

soldiers near Belle Plaine, Va., shortly after the first battle of Fredericksburg. A great discoverer in Cincinnati informed us that the whole trouble connected with the epidemic of camp measles then tormenting us was due to microscopic germs, but I was somewhat troubled to account for the fact that my division suffered more than an adjoining one, which had lots of straw, whilst we had none. Not having microscopes amongst our impedimenta, I never found out the truth about this fungus, but got rid of the sneezing by other means.

After the war closed, whilst stationed at various points in the South for the next succeeding five years, I investigated the action of electricity on various germs, or on such diseases as rubeola, variola, varicella, scarlatina diphtheritis, and malarial fevers, and, later on, such germs as those found in decaying solutions; for example, volvox globator, oblong megalocystic bacteria, rod-like bacilli, sigmoid vibriones, coiling spirilla, the fermentative or zymotic torula cervisiæ, and the sarcina ventriculi from vomited ingesta of dyspeptics. Considerable time was given to the organisms found in pus of many kinds, but particularly that of gonorrhœa and gleet, as described in a paper contributed by me to the Philadelphia Medical Times for November 4, 1882. Together with these were studied germs from saliva, mucus, blood, and urine, in the diseases cited above and others.

In all my papers on any subject, I have been sparing in saying anything about pathology, but I may go so far now as to state my opinion that, in a large degree, germs of any kind, when present in the tissues, act by destroying them, to some extent; and, as a consequence of this, the albuminoids are decomposed more or less; the resulting action is, in a large degree, the production of ammonia or other alkaline matter in excess. If this is true, and I believe it to be so, then the well-known polar action of electricity in traversing the tissues carries the products of electrolysis to the applying electrodes, the acids going to the one and the alkalies to the other. The change of chemical condition with the action of the current, *per se*, on the cellular tissue, will, if made sufficiently definite, destroy the abnormal condition within the path of the circuit. It therefore follows that, if we can influence enough territory, and influence it powerfully, it is not alone probable, but highly possible, that a germicidal action on bacteria or other disease-producers is attainable, and the result of a goodly number of experiments in actual disease in the human subject has caused me to feel that there is something in this line of work, if it is carefully carried out. I am not unduly enthusiastic on electro-therapeutics; I am not cranky about electricity in any branch; I do not attach any mysterious powers to this form of force at all; I am, however, willing to advance the prophecy that before all of us are translated nearer to the realms of static electricity, germs will be more afraid of us than they are now. I expect to be criticised when I say this, and I am willing to hear what is said; I appreciate the comments of gentlemen competent to discuss this matter; their opinions are valued because valuable, whilst the polyphonous reverberations of those megalocystic individuals who know that electricity has no place in medicine or surgery, whenever we rub their fur up the wrong way, are a matter of profound indifference to me, their opinions being as vacuous as their knowledge of what they are talking about.

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My plan of experimenting was this: Having selected a colony of germs, they were inclosed in tubes of varying size,—from that such as iron or other medicines are taken through to those of considerable length and diameter,—from two inches by an eighth to ten feet by an inch. The germs were contained in fluids such as bouillon, glyceroles, syrups, water, etc., and their activity was made apparent by the microscope before subjecting them to the current. At either end of the tube was a wire imbedded in the cork of vulcanized rubber, some of the wires being platinum and others copper. The forms of electric force used were currents from a thermopile, from a magneto-faradic machine; a galvano-faradic apparatus, from primary batteries, arranged variously, in series and combinations, from a secondary accumulation; from Wimshurst and Toepler-Holtz static machines; and from dynamos for arc and incandescent lighting. Several types of the two latter were employed, wound for varying quantity and pressures. After subjecting the liquids to the current for a definite period of time, the contents of the tube were again examined microscopically, and notes made of the result, if any.

I have learned from the Scientific American, lately, that Dr. Robert L. Watkins, of 320 W.

One Hundred and Forty-fifth Street, New York, has devised an ingenious method by which the action of the current can be studied whilst in operation. He employs a slide, with a cell ground into it for the reception of the culture, the current passing through this from wires at the sides, and, with low power, this will be very effectual; but with high energy, or with static electricity, there is danger of contact of the current and the microscope itself. The doctor holds that electricity is a germicide, which I am glad to note.

Thermo-electricity was dropped as useless after a few trials. The static machine was employed by sending continuous showers with and without the condensers through the fluids, and using disruptive discharges from batteries of Leyden jars. The continuous flow and the heavy sparks acted alike; that is, they apparently destroyed the germs for a time, but without uncorking the tubes they re-appeared. Strong doses from the Leydens did the business for the interlopers every time; and they kept quiet, no matter how long the tubes were left, if the corks were reliable. Faradism from any source destroyed the germs, and strong currents were needed. Bearable currents, however (and by that I mean such as we could endure, without too much inconvenience, for fifteen minutes, through the hands and arms), were of little account, except with the torula and sarcina ventriculi; but it seems to me that, although bad dyspeptics will do almost anything to secure relief, it would be wrong to send such strong voltage through their epigastriums, particularly as the solar plexus is so closely adjacent to the affected locality. Induction currents, then, may be set aside as of little reliability; that is, those used in medical apparatus. Galvanism readily destroyed all varieties of germs, from 25 to 175 milliampères being required, and currents from all dynamos did so also. Strong currents, such as from 10 to 35 ampères, not only killed the enemy, but actually melted him out of sight. Quantity or ampèrage was the main essential; for low quantity, under strong voltage, was ineffectual; whilst high ampèrage, under comparatively low pressure, was efficient always. This might be inferred from the result of faradic experiment, hence it is needful to use batteries giving good quantity; the chloride of silver elements would be useless, of course, although, for other purposes, I esteem Barrett's very highly. The comparatively high ampèrage required is not antagonistic in theory nor practice, for I found long-continued currents of safe quantity to be perfectly efficacious. Here the question is also that of time; enough coulombs would do the work. The time element ranged from that of instantaneous single sparks from the rods of the static machines, and similarly brief discharges from the Leyden jars, to a continuous flow of fifteen minutes; in the case of faradism from single make and break to an hour was employed; with galvanism and dynamo currents the period varied from a single second to six hours. I may here take the opportunity to enter a plea for the necessity of more attention to the use of the coulomb-meter, an instrument almost universally neglected by the electro-therapeutist. We should know equally how much electric force has passed as how strong in quantity or voltage it happened to be. And, whilst I am making suggestions, let me say that the storage battery should be carefully handled in such experimenting as that I am speaking of. This form of cell has a tendency, under short circuits (when low resistance is interposed), of personating somewhat the static phenomena, and things are apt to get too hot for comfort, if care is not observed. A secondary battery will unload itself in a big hurry, if it has half a chance to do so.

Having briefly stated what I did, how I did it, and what the result was in experimental work purely, I may say here that I have obtained satisfactory results in actual practice in a number of diseases known or believed to be due to germs or parasites, such as in scabies, lichen, favus, etc. In typhoid fever, in dysentery, in phthisis, in diphtheria, in intermittents, and in sporadic cholera I have had undeniable results for good, and in one case of cholera, which was fast going the wrong way under canonical treatment, with a consultant helping me, no sooner did I begin the application of galvinism to the abdomen than the cramp, the rice-water flow, and the algid tint of the skin began to leave, the woman doing well thereafter. And this is singular, when we remember the fact that electricity is a good thing to provoke intestinal contraction or peristaltic action. Maybe it contracted her so much that nothing could get up or down; anyhow, she got well.

I close the first part of my paper by saying that my object at present is not so much to tell what I have done in this direction as to suggest the desirability of gentlemen, whose ability is better than mine, taking up this matter, which, under proper investigation, may produce meritorious results, because, if modern theories are correct, we are greatly more dependent thus far upon the amœbic warfare between pathogenetic bacteria and leucocytes than on drugs.

Having said this much on the first topic, I now turn to the other: Has electricity any action in producing poisonous results in food?

From the time when Eve began her dietetic inquiries in the mythical Garden of Eden till the present date, it has been the fashion to attribute to electricity the blame for all the internal upheavals both of man and nature. Earthquakes, boiler explosions, and threatened ruptures from excessive flatulence after the ingestion of canned salmon, fruits, and like comestibles, have all been ascribed by the laity to the mysterious operations of electricity. One of the latest demonstrations of this nature was started by an article published in the Philadelphia Medical Times, in August, 1887 (and the paper was reprinted essentially in the Medical News, in June, 1890), from the pen of Dr. George S. Hull, of Chambersburg, Pa. On a superficial view of its premises and conclusions, one would naturally think the knotty problem solved; and, considering the lots of trouble which festive picnickers have had with their internal economy after spending the day playing copenhagen (whatever that may be), and gorging themselves with all attainable qualities and quantities of comestibles, with a view of getting as much, or more, out of their neighbor's basket as he does out of theirs, it would be a real blessing if we could fall upon the microbe which is responsible for the disastrous possibilities attendant on so many happy gatherings, and which, doubtless, prevents more picnics being held and more nice young ladies going to those which are held in fear and trembling when the appetite for this toothsome delicacy is considered, and when we think of the tons of it which actually disappear from the face of the earth, anyhow!

The doctor holds that all freezers are galvanic cells, and that to this hitherto undetected fact the trouble is principally due. I have carefully repeated all his experiments, and added to them others of my own, with the purpose of getting at the bottom facts in the business, and first: the doctor claims to have found that a freezer filled with pure hydrant water caused a good galvanometer to undergo a deflection of 8 degrees; with sweet cream it ran down to 7; with sweet milk it jumped up to 40. Equal parts of cream and milk averaged the matter—the needle indicated 25; the addition of sugar and vanilla simply drove the record to 58; corn-starch, added to sweet cream and milk, raised it from 25 to 45; but eggs sent the index spinning up to 80. All mixtures, whatever their nature, when sour, went to 90, showing that acid had power to only add 10 degrees to the state of affairs under compounds of sweet cream, vanilla, milk, and eggs—a curious anomaly. The doctor further suggests that salt is sometimes added to increase the flavoring, and that will produce zinc-chloride, by action of the salt on the paddles. So far as this point goes, it is sufficient to state that the addition of sixty grains only of salt to three quarts of cream will not only prevent its being kept solid after freezing, or, rather, after the paddling ceases, for it won't freeze, but it will so affect the flavor as to spoil it in the case of any one except a person devoid of a palatal nerve, when sober; and, moreover, the amount of zinc-chloride thus produced (the milk or cream being thoroughly sour), after the mixture has stood for six hours, is too small for detection by careful analysis. Should action be caused on the zinc of the stirrer or paddle by any means, the salt resulting would be the lactate of zinc, and this, although not much used nowadays, is sometimes given by myself in epilepsy, in doses of 10 grains four times a day, and without the slightest harmful result. Careful and repeated trials have shown me that galvanic action with zinc anodes, with any kind of cathodes, through lactic-acid solutions in varying amounts, is very low; with tin it was 2 milliampères; with iron, 3; with copper, 6. The zinc freed into the electrolyte was always infinitesimal in amount, and we can understand, by referring to the slow destruction of our Leclanchés in a solution more active than the lactate (the ammonium-chloride), how small must be the quantity of metal in such instances, and how very harmless it must be. The tin, iron, or copper forming the can is worn by abrasion, after a while, of course,

the scraper which takes the cream from the inside gradually rubbing it away; but then the salt thus made is of tin, which is perfectly innocuous. Our own household apparatus has been in use for more than ten years, and has been used twice a week, at least, all that time; yet, in spite of hard usage, and with mixtures of plain and fancy creams and ices, many of which, in the summer, are acid in nature, the wear is hardly noticeable at present.

As I have said, lactic acid is the commoner one, found in milk and creams; the summer fruits are somewhat sour, but not much so, lemon being the principal one; the strawberry and raspberry, with banana, and the ices of orange, etc., being actually sweeter than the plain fruits themselves when frozen; they have shown not a particle of action on the zinc at any time with me.

When we remember that many more deaths have been traced to another confection than ice-cream, namely, the delicacy known as cream-puffs, which is not frozen at all, but which, on the contrary, is both boiled and baked at a high heat; and when we consider the fact that cheese has frequently produced the same poisonous symptoms as those from ice-cream, we must look beyond electricity for the blame. No doubt exists in my mind that the entire trouble comes from the well known "tyrotoxicon" alone; yet, there is sometimes danger from the eggs and flavoring materials. The method of preserving eggs are various—"liming" being the commoner; the largely-used "cold-storage," however, is widely practiced, and, however fresh the eggs may look, they are often so ancient as to be venerable. Cheap confectioners use them freely, and much trouble has come from this source when used in cakes, creams, and charlottes.

Then, again, just think of the gormandizing practiced at weddings, parties, and picnics! Nothing comes amiss to the participants in the way of feed, for feed it is pure and simple; it isn't food. Why, the swill-tub in the morning hasn't a ghost of a chance alongside of the stomachs of the guests—raw, fried, scalloped, stewed, and roasted oysters; raw and devilled clams; chicken-, lobster-, and crab- salads (and, it is shocking to tell, there are folks who, to save a trifle, will put in veal to stretch out the fowl in the salad). A farmer once told me that the only way some of his neighbors could utilize "dropped calves," which are miscarriages near enough to term to stick together, was to sell them to the caterers. On top of this comes croquettes; then potted meats; ices and creams; sherbets; lemonade, wine, and coffee; cakes, candy, and sometimes beer to drown the whole.

Moreover, the chicken is not always inspected by the Board of Health prior to being promoted to the dignity of assuaging the voracity of those who do without lunch, and, maybe, tea, too, so as to be in good shape for the battle in the dining-room of the generous host (or hostess) of the evening. Why should not some of these cormorants get sick occasionally? They do, and forthwith the ice-cream is blamed. Within my own personal knowledge in some of the cases where poisoning followed banqueting, and where the ices were blamed, investigation proved that the victims had taken none of the creams at all.

Further (and this is an important point), a freezer is not, in its construction, a galvanic cell. The two metals, zinc for the paddle, or stirrer (that is, iron coated with zinc) and tinned metal for the can, are joined together closely at the top by the cog-gearing and at the bottom by the step in which the stirrer revolves; hence, there is a continuous circuit of metal, and no necessity exists for an internal circuit through an electrolyte. The cream undergoing freezing does not endure the passage of any current at any time. This I have demonstrated over and over again in the actual facture of creams in our own apparatus, the current, if any, taking the path of least resistance, of course, which is round the metals. To make a galvanic cell of a freezer, the zinc would have to be thoroughly insulated top and bottom from the can and holder, just as the zinc is in any galvanic couplet; that is, the paddle would have to be held in a non-conducting collar, separating the can from it, either at the insertion of the paddle with the gearing, or between the can and cover; then, also, the paddle would not be allowed to touch the bottom of the can, or it would have to be stepped in a non-conductor. No freezers are thus constructed, and the very slight local action which exists at any point where dissimilar metals touch in the liquids within the freezers is so slight as to be absolutely negligible. Still further in the line of objection to this theory of electrical poisoning, it is well known that for some years past all large makers of

creams do not use the old-fashioned revolving paddle; they beat the mass up with wooden paddles by hand in cans made of iron, usually, and lined with porcelain, such as we see in the ordinary household stewing utensils. When the mixture has attained a certain degree of stiffness, it is "iced-up," as the trade-phrase goes; that is, the water formed by the melting of the ice and salt is poured off, and the can covered with clear ice, free from salt, and allowed to stand till solidly frozen, or till wanted for consumption. That dirty, unlined cans, will set free a small amount of solder, zinc, or tin, is possible; but few people, who employ unlined cans now, are so careless as to use them without their being thoroughly washed out before making the cream. It is also possible that when creams are permitted to stand a long time before consuming them they may be contaminated by dirty cans; but the symptoms in all cases of sickness that have come before my knowledge have never been those of metallic poisoning at all. All my experiments were made with either our own apparatus, or that of well known manufacturers; the test instruments were delicate, tangent galvanometers; the residual products were thoroughly tested by one or more pharmaceutical friends for metallic adulteration, and in none of them could an amount which would by any possibility be dangerous to even an invalid be detected. To study the effect of the current, *per se*, I sent through creams and fruit-ices at times currents ranging from 5 milliampères to 35 ampères, and under pressures of from 5 to 500 volts. The materials were never injured in the slightest; in fact, they were improved by the process, and a powerful current would not only prevent souring, but it would correct it if not too great. It is true that static electricity will cause milk and cream to sour, and I suppose this is due to the intense quantity of ozone set free in the vicinity of static machines, and in the air during thunder storms.

Professor Tolemei, of Italy, holds the same opinion, as I see lately by a note in an electric journal, and he further says that milk treated by electricity will keep sweet for ten days or more, when otherwise it would sour in two. Dr. Henry McClure, however, in the British Medical Journal, thinks that the acidity in milk is caused not by the ozone, but by germs thrown down from the atmosphere, much as static electricity causes dust and fumes to settle in ducts used for making metallic oxides.

The varieties of creams and ices experimented with embraced the following: Creams,—vanilla, chocolate, bisque, banana, lemon, strawberry, raspberry, huckleberry (or whortleberry), orange, pistache, and coffee. Ices,—lemon, strawberry, orange, sherbet, raspberry, current (red), and raspberry-vinegar, with enough gelatin to make it solid. All stood for six hours after paddling to harden, and all were eaten to the last spoonful by my family, occasionally assisted by friends. Now and then, what was left at dinner, or at tea-time, was consumed at either tea- or at bed-time, as the case might be. None of us ever suffered from the experiments any more than from other times when the diet was taken in the ordinary course of living. In fact, whilst these experiments were in progress, my folks, or those who assisted me, did not know they were engaged in this very laudable investigation.

Ice-cream is much more wholesome than is generally supposed, and it is more carefully made than is usually believed. A neighboring confectioner, whose family in many branches has for many years been prominently in the business, tells me that I am correct in my beliefs so far as the care is concerned, and that it is all nonsense to talk of putting salt and such matters as bad milk, sour cream, etc., into the mixture, as sour stuff will not freeze nor stay hard if it did freeze. The trouble, when there is any, which is very seldom, is entirely due, as he and I believe, to tyrotoxicon, which is an exceedingly complex poison, forming in a short time when milk or cream is exposed to damp, such as the "steaming" seen in cellars, arising from the ground after storms. It is associated with a large number of bacteria, and to this substance is often added other toxic germs, such as the "odium lactis," a penicillium, and the "bacillus cyaneus" (blue milk), together with others from diseases which are unknown to exist or purposely overlooked in the cow. Swill-fed animals are very liable to disorders of the intestinal canal, and their milk often suffers in quality and character under such conditions. Next comes the trouble from stale eggs, with now and then danger from the use of chemical flavors, such as oil of myrbane in lieu of almonds, and the like. Much of the trouble with children, lately, comes from the eating of candies thus flavored and colored

with coal-tar products and terebinthinates. Besides investigating the possibility of poison from ice-creams, I have looked into that supposed to come from various canned meats and fruits, and in none of them was their any reason to look beyond the spoiled substance itself; the cans were all right so far as a careful chemical test went. Now and then chloride of zinc is used to hasten work by tinners who are not expert in fruit canneries, in place of resin, but this is uncommon; most of all cases are due to imperfect sealing, which permits air to enter, and thereby causes decomposition, thus forming poisonous ptomaines (many kinds are innocuous).

In closing the second part of my paper, I have no hesitation in saying that I do not believe that electricity has any accountability in causing poisonous effects in food, and, with all due deference to Dr. Hull, I hold this to be especially so in the largely used, and very palatable delicacy to the fever patient,—ice-cream.

246 North Twentieth Street.

*REPORT OF A CASE OF BULLET-WOUND OF BRAIN AND ONE OF COMMINUTED FRACTURE OF THE SKULL BY A KICK FROM A HORSE, SUCCESSFULLY TREATED BY ANTISEPTIC SURGERY.**

By JOSEPH H. WILLS, A.M., M.D.,
Surgeon to Cooper Hospital, etc.

T. T., aged about 40 years, married, was admitted to the Cooper Hospital, May 15, 1891, suffering from a self-inflicted pistol-shot wound of the brain. Mental depression from inebriate habits and ill health from having had an attack of *la grippe* seemed to have been the cause of the act. He had been examined at home, it was so said, by two homœopathic physicians, who decided that the ball had not entered his brain and that he would be all right in a day or two. A ball, or portion of a ball, it seems, had been found in the bed.

A third physician, a member of our city society, having been called to the patient, decided it to be a serious case of brain injury, needing a careful operation, and caused him to be sent to the hospital. On admission his mind was perfectly clear and his temperature was 96⅔ degrees. Hot-water bags applied to the surface of the body soon brought this up to normal.

He had a double penetration of the integument, about an inch above the right eyebrow, as though a ball might have entered that distance above the outer limit of the eyebrow, and, passing horizontally under the skin, had emerged at a point on a line perpendicular with the centre of the eye.

Examination proved a penetration of the brain at the outer or apparent point of entrance, with a comminution and some depression of the skull between the first and second openings in the skin. I attempted to carefully follow with a bullet probe the penetration of the brain in a direction upward, backward, and to the patient's left (the head supposed to be in the normal upright position), to a depth of three inches, the probe appearing to have penetrated the left frontal lobe. No ball was reached, but spiculæ of bone were felt for some distance.

There was hæmorrhage from the nose and ecchymosis of the right eyelid, giving us the impression of injury to the ethmoid bone or its vicinity. I made an incision about an inch long, connecting the two perforations in the skin, and removed the depressed and broken skull between the openings. The number of small spiculæ of bone quite deep in the brain caused me to use my little finger as a probe so as to remove them all. As I laid one of the jagged pieces on a towel, its color and feel caused me to examine it a second time, when I discovered it to be a distorted mass of lead. This had been imbedded fully an inch and a half in the right frontal lobe, in a direction directly backward from the depressed bone that had been removed.

I probed that lobe in every direction, upward, downward, and sideways, even feeling the inside of the skull with the extremity of my little finger to be sure of removing every fragment of bone. I could see small fragments of brain at times adhering as I removed my finger and bullet forceps together. Satisfied that I could find no more loose foreign bodies, Dr. Webster, my careful assistant, then washed the wound thoroughly with 1-to-2000 bichloride and prepared a few strands of large antiseptic suture catgut for drainage. I imbedded this in the wound so as to emerge at the two extremities, and with catgut we sewed up the incision. A half-inch of skull had been removed horizontally between the two penetrations of the in-

* Read before the Camden County Medical Society, November 10, 1891.

tegument. Bichloride wash was used almost continuously during the closing of the wound. Iodoform was quickly dusted over it and a wet bichloride-gauze dressing was applied and covered well with bichloride cotton before the head was bandaged. All this was done without ether, the patient not seeming to feel agonizing pain. He would occasionally ask me to "Hold on, doctor." Then I would stop for a moment to satisfy him.

That night his temperature rose to 99⅔ degrees, and the next morning and evening touched 100⅗ degrees, the highest it reached. As a special precaution against germs I ordered the dressing to be wet daily from the outside with 1-to-2000 bichloride for a few days, so as to place an extra guard around the wound to cope with the streptococcus pyogenes, and other germs which cause brain injuries to be fatal.

On the third day after the injury the temperature dropped to normal. For a week or two there was restlessness and a tendency to not answer questions intelligently. Therefore, for a time, we had him on calomel, ⅛ grain with a little opium every four hours; at the same time we watched his gums for the first appearance of salivation. He tore off his dressings once, a few days after the injury. Dr. Webster thoroughly washed the wound and replaced the dressings, so we had no complication from the accident. The dressing was not removed again for more than a week.

He was, at intervals, given bromide of potassium, about 20 grains every four hours, to quiet him. His diet at first was exclusively milk; after he was much better it was changed to a soft diet. When asked the next day or so after the injury if he wished to get well, he replied, "Yes, indeed I do." At this time it was interesting to note an extreme sensibility of the skin over the right side of the face, also this side of the neck to a short distance below the collar-bone.

Twenty-four days after the injury the wound was left uncovered. Not a drop of pus had been seen in the wound at any time. The finding of two bullets I can explain, having weighed the mass of lead extracted. I find it weighs 54 grains, while a full-sized ball weighed 89 grains, making the mass 35 grains short of a full-sized $\frac{32}{100}$ ball. From the apparent point of entry a trough-shaped depression of the skull reached to the second, a slit-like opening. The latter might have been made by a chipped-off fragment of bullet emerging thence after passing along the groove of depressed bone. I cannot produce the full-weight ball because the portion found at his home was lost through the carelessness of some one dustiug it off the mantel.

His mind had so far recovered its intelligence by June 18th, the time of his discharge, a month after the injury, that his father-in-law answered to my inquiry the next day, about his mental condition, that he seemed as well as he had ever been.

About the first of November, four and a half months after the injury, the same gentleman told me our former patient was employed as a carpet salesman on a salary of $1000 a year.

I would also report the case of J. B., aged 9 years, admitted to the Cooper Hospital, June 17, 1891, suffering from a comminuted fracture of the skull occasioned by a kick from a horse he was watching while the animal was grazing by the roadside. The hoof of the horse had raised the orbital portion of the frontal bone of the left eye and driven the supra-orbital ridge upward and inward, and splintered the frontal bone above the ridge for about a width of three-quarters of an inch.

The lachrymal gland was in full view. Under ether, with considerable difficulty, the orbital portion of the frontal bone was pried down into position, and a lateral piece of frontal bone, that was somewhat pressed outward, was brought in to meet the orbital portion. The compressed brain then assumed its normal position, with the dura mater intact, except in one place where there was a perforation in it the size of a pea. All the loose fragments of bone were removed from the wound. Then it was carefully washed with bichloride, 1 to 2000. This wash was applied during the time the skin was being sutured with antiseptic catgut over the gaping frontal bone. Iodoform was dusted freely over the seat of operation, and the ordinary bichloride gauze was placed over the wound, and the whole carefully covered with antiseptic cotton and bandaged.

The dressing was dampened each day for a few days from the exterior with 1-to-2000 bichloride. The boy's recovery took place without the slightest bad symptom attending it, and he was discharged on August 3d. These two cases help to illustrate the inestimable value of antiseptic surgery in brain wounds. Such brain injuries, especially like the one first mentioned,

dressed after the custom of ten years ago, would have been necessarily fatal. At least, this is the impression I gained from an experience, about that date, as resident physician in the Pennsylvania Hospital, when such injuries were quite frequent.

SUSPENSION OF HUMAN BODY BY INVERSION.

By HENRY V. GRAY, M.D.

BEFORE advancing any theory for this new factor for medical recognition, it will not be out of place to pass rapidly in review that portion of medical literature which has been so ably advanced and sustained relative to suspension as a remedial agent.

The cephalic shoulder suspension method of treating disease was first advanced by a Russian physician in 1882,—Matchoukowsky,—who was applying at the time a "plaster-of-Paris jacket." He made many experiments, but it was left to others to carry experimentation to an extent commensurate with its value, which gained the respect and attention of the profession at large. Charcot, of Paris, seemed to at once recognize its value, and threw his entire mental power into it and thus won the name—not always just—as was the case in naming this country America instead of Columbia or Columbus. Hammond then suggested suspension entirely by the head. All these gentlemen deserve great praise, but none more so than the last named, as cephalic suspension is surely a most valuable suggestion.

The following is the theory: They claim that suspension stretches the tissues, breaks up old adhesions, increases the blood-supply, thereby assisting nutrition and lessening the waste of tissues. Cayney states that there is a shortening of the cord instead of extension. Some physician, of much good sense,—his name I cannot, unfortunately, recall,—has given us a very plausible theory, "that the spinal column is lengthened and the cord increased through a vacuum, effecting an aspiration or suction." It is a truth which physiology will sustain, provided cephalic suspension, as advocated by Hammond, is used instead of cephalo-shoulder. The former stretches; the latter shortens. The writer can speak advisedly upon this point, as he has been subjected to both when under treatment by Dr. Hammond, at his sanitarium, for a cerebro-spinal trouble, which he will bring forward at some future time.

A comparison of the theories advanced upon suspension treatment is essential to a proper understanding of the new departure,—supension by inversion, head down, heels up.

To bring out a proper theory, to gain the respect of the acute intelligence of our profession, we must guard well the points taken, or we bring ridicule upon ourselves.

We have, in a large majority of the diseases of the cerebro-spinal and other systems, a congestion, inflammation, anæmia, atrophy, and hypertrophy to contend with, and, as this method of treatment does not apply to any special disease, we hold in abeyance the *status quo* until it is tested further.

The cerebro-spinal system will be hastily and cursorily run over to furnish proof for an intelligent theory:—

1. The brain (encephalon) is made up of two kinds of matter,—gray and white nerve-tissue,—together with five ventricles or cavities and three coverings or membranes. The gray matter is in the convolutions, and the white within, excepting certain centres.

2. The spinal column is made up of many segments (vertebræ) joined together by ligaments, intervertebral substance, etc. The spinal cord is divided into fissures and columns, with a central canal (sometimes called the sixth ventricle); the white matter being on the exterior of the cord, and soft, gray matter within. This change of nervous matter, being in inverse order in brain and cord, is not by mere chance. The cord is surrounded (like the brain) by the same three membranes. In the cord the dura mater is very loose, and does not dip down into its substance to form septa as it does in the brain, but has a space called the subdural space. The arachnoid membrane also has a space called the subarachnoid space. The latter is much larger in the lower part of the spinal canal, and incloses the mass of nerves which form the cauda equina, or tail end of the spine. This space is well filled with an abundant secretion, the cerebro-spinal or subarachnoid fluid. "The central cavity of cord and the subarachnoid space communicate with the general ventricular cavity of the brain by means of an opening in the pia mater, at the inferior boundary of the fourth ventricle or

cavity—foramen of Magendie." This fluid is 3 or 4 ounces in amount, together with lymph, furnishing a material necessary for the nourishment and lubrication of the nervous system.

3. The intervertebral substance, situated between the bodies of the vertebræ, takes up about one-fourth of the spinal column. "It is a lenticular disk of fibro cartilage." This substance gives elasticity to the vertebral column, and prevents those shocks which would take place in jumping, dancing, etc. It is quite soft in the centre—pulpy and highly elastic—and has a synovial cavity. The disk will stand a great deal of pressure, and has a minus difference of one-half an inch in the erect position over the horizontal.

4. The marrow of bones—long bones particularly—fills up the medullary canals and extends even into cancellous meshes, and is composed of 96-per-cent. fat The cells of the marrow are supposed to be changed into the red blood-corpuscles, and have a movement of the same nature,—amœboid.

Take now your double pulleys and rope and fasten to a hook in your ceiling; take a seat upon the floor; place your feet in two soft-padded rings stretched out by a bow or stick which is attached; lie upon the floor, and you are ready to demonstrate your theory. Taking the rope yourself, or getting some one else, very slowly draw it, and within ten minutes you should have your head clear of the floor, and, of course, your feet at full length in the air only for a moment or two. The body being sustained in this position, and the back being gently stroked by your help or assistant, you have reversed the order of the fluids of the spine, and a check or reversion of all the fluids of the body. Every portion of the system feels a change. Recollect, the spinal and cerebral fluids are diminished, increased, or rendered abnormal, according to the character of the disease. An impaction and precipitation sooner or later follow, and only by inverting the patient can you get the fluid to circulate properly in the ventricles of the brain and around the spinal cord, and, like a thirsty traveler crossing the great desert, the imbibition of only a few drops of this fluid of life gladdens the brain and cord, and gives them some assurance of renovation and restitution. This inverse method pleasurably surprises the entire system or constitution, and cannot be otherwise than beneficial in properly selected cases. Do not expect too much. It is a factor only.

1. *Caution.*—Should your patient be very much exhausted with great waste of tissue of the system, you must support the spine by by pillows and practice gradual suspension of legs, hips, and body before you attempt to raise the head from the floor. A suspension of head, with stroking more and more vigorous each time, will not do to exercise principally more than once or twice a week.

2. Should there be congestion or fever to any extent, you would only tentatively call to your aid this powerful agent. It has power; therefore, advance cautiously. Place the pulleys in the office ready for use.

3. It is more especially useful in chronic cases, particularly of the nervous system. It is useful in children's diseases as well as adults.

4. If the muscles are greatly relaxed and the reflexes abolished, be cautious and use it very gradually,—slight suspension of feet at first, then of legs, then of thighs, then of hips, etc., until strength returns sufficiently for the head to clear the floor.

ROANOKE, VA., December, 1891.

ABSTRACTS.

DEFECATION BY THE MOUTH.

Such a case was reported at the meeting, November 27, 1891, of the Hospital Medical Society by M. Desnos. The patient was a young man who had been found senseless upon the street. When brought into the hospital a little froth was seen upon his mouth. He had escaped from a lunatic asylum. The attacks from which he suffered resembled those of epilepsy, although some hysterical stigmata were found upon his body. In several paroxysms fæcal matter issued from the mouth. The patient asserted that he had not had an anal evacuation for two years, but passed everything by the mouth. In two cases the buccal evacuations took place in the presence of the speaker's interne and the nurse of the ward. The masses were partially molded and had a characteristic odor. They were often ejected after a meal, and never contained any trace of alimentary substance. At the time of evacuation the man complained of pain in the back and swelling of the abdomen. The manifestation had begun two years previously, in consequence of an in-

jury which had produced a cicatrix in the region of the anus.—*Le Progrès Médical*, December 5, 1891.

DIPHTHERITIC BRONCHO-PNEUMONIA.

In a communication to the Biological Society at the meeting of November 28, 1891, MM. W. Dubreuilh and B. Auché stated that in 3 cases out of 5 they had found the bacillus of Loeffler in the mucous membrane of the bronchioles, far beyond the points where false membrane was present. They were not, however, able to demonstrate the existence of the same microbe in the parenchymatous structure of the lung in the foci of broncho pneumonia. Colonies of the bacillus of Lœffler were sometimes recognized in the cultures, but streptococci, pneumococci, and staphylococci always predominated, and it is probable that the micro organisms of diphtheria were derived from the bronchial mucous membrane. In short, diphtheritic broncho-pneumonia is a secondary infection due to pyogenic microbes and pneumococci, the Klebs-Loeffler organism being of inconstant occurrence.—*Le Progrès Médical*, December 5, 1891.

TOXICITY OF THE SALTS OF BARIUM.

This was the subject of a note read by M. Bardet before the Therapeutical Society at the meeting of December 9, 1891. The following is the result of his experiments: Large doses (2 grammes per kilogramme) are fatal to the rabbit in one hour; 50 centigrammes per kilogramme cause death in three or four hours. Any dose exceeding 10 centigrammes per kilogramme was lethal. It appeared to the speaker that 0.08 centigrammes per kilogramme was the limit of a toxic dose. He had found it very difficult to make subcutaneous injections, as they gave rise to so much pain. It has been said, as a result of intra-venous injections of chloride of barium, that the coefficient of toxicity of that salt is high. The chloride of barium occasions coagulation of the blood and death results mechanically from embolism. At the preceding meeting M. Bardet had reported the death of a woman from 4 grammes of a barium salt, and this toxic dose corresponds to the results of physiological experiments. It is possible to recognize in a solution of strontium salts the presence of 1 milligramme of a salt of barium in 10 cubic centimetres. The detection is made by means of an acetified solution of the bichromate of potassium. In carefully made salts of strontium, barium salts are found in the proportion of 1 to 1000. There is, therefore, no danger in their use. Even if as much strontium as 15 grammes per day was administered, no toxic effects could be produced. Hydrofluosilicic acid is a very bad reagent with the salts of strontium. The bromides of strontium always form a slightly turbid solution, probably due to the presence of lime salts. —*Le Progrès Médical*, December 12, 1891.

THREE CASES OF LICHEN PLANUS TREATED BY HYDROTHERAPY.

At a meeting of the French Society of Dermatology and Syphilography, December 10, 1891, M. Jacquet described his management of 3 cases, the results being confirmatory of those which he had previously announced. By the employment of douches he had obtained a cure of the cutaneous lesions and a disappearance of the phenomena of nervous erythism. He admitted that the method may be open to certain objections, as he has seen vague pains and even mental symptoms in consequence of the perturbing influence of the douche. He considers lichen as a cutaneous neurosis, the lesions of which are artificial, due to scratching and the irritation of a skin the vasomotor tonus of which is exaggerated.—*Le Progrès Médical*, December 12, 1891.

LEPROSY IN BOKHARA.

According to the Rousskaia Meditcina, the source of leprosy in Central Asia is a region situated to the northeast of Bokhara, peopled only by lepers. These neither have nor desire any physician, marry among themselves, and generate offspring which become leprous from the age of 17 years, until which age children exhibit no signs of the disease. This contaminated progeny transports leprosy throughout all Central Asia and even to more distant regions. In order to check such propagation, the Emir of Bokhara has decided, in consultation with Russian physicians, to found a hospital devoted to lepers. He has engaged eminent specialists, and ordered a complete separation of male and female patients, with a view of preventing transmission of the malady.—*Le Progrès Médical.*

A CASE OF BRONCHO-PNEUMONIA IN WHICH INSUFFLATION RELIEVED GRAVE ASPHYXIA.

The following case is reported by J. Renault, interne at La Maternité: An infant, 1 month

old, suffering from broncho-pneumonia, was almost completely asphyxiated, when, rather to console the mother with an effort to save life than with a hope of succeeding, Madame Henry, the midwife-in-chief, who had been hurriedly summoned, introduced the insufflator used for the purpose of reviving apparently dead newborn babes and inflated the little patient's lungs. The instrument was withdrawn from time to time, in order to cleanse it of mucosities. At the end of five minutes the cyanotic hue began to fade and was replaced by a rosy tint. This unlooked-for success encouraged further attempt, and, after a quarter of an hour's exertion, the babe was revived. It was then placed in a mustard bath, some dry-cups were applied, it was wrapped in cotton, and some brandy-punch was given. The cyanosis, however, re-appeared, when the same procedure was resorted to, with more pronounced results. The thoracic manifestations, indeed, with the fever and accelerated respiration, persisted, but the infant ultimately recovered.

It is not pretended that the insufflation was the cause of recovery, but it rescued the child from asphyxia and afforded a chance for the medicine to prove effective.—*Le Progrès Médical*, December 19, 1891.

COCCIDIA FOUND IN THE INTESTINE.

At a meeting of the Biological Society, December 12, 1891, MM. Baillet and Luçay read a communication upon this topic. They had observed these parasites in the intestine of various species of animals and of man. The coccidia reside in the epithelium. The authors say that there exists constantly no great difference between the oviform and perforating forms. The different phases of their development have been described by Balbiani, who concludes that their evolution depends, in all probability, upon the thickness of their envelope.—*Le Progrès Médical*, Dec. 19, 1891.

TETANUS ASSOCIATED WITH DILATATION OF THE STOMACH.

At the same meeting of the Biological Society, MM. Bouveret and Devic reported their study of 3 such cases. They believe that the nervous complication depends upon hypersecretion. As a result of hypersecretion, the stomach contains peptone, free hydrochloric acid, and, in drinkers, alcohol. Now, this mixture produces, *in vitro*, a toxic substance obtained by Brieger, and by him termed peptotoxine. This gives rise to convulsions when injected into the veins. It is, therefore, reasonable to think that the tetanus which sometimes supervenes upon alcoholic excesses is due to the peptotoxine of Brieger.—*Le Progrès Médical*, December 19, 1891.

EFFECTS OF MASSAGE.

M. Castex communicated to a meeting of the Biological Society, December 19, 1891, the results of experiments made in the laboratory of M. Ch. Richet. Bilateral injuries were inflicted upon dogs at the hip or the shoulder, and one side was submitted to massage, while the other was left without treatment. At the end of some months the muscles, nerves, and spine of the two sides were carefully examined. The *massé́d* side was generally free from lesion, while more or less inflammatory action was to be seen upon the neglected side.—*Le Progrès Médical.*

SPASM OF THE ARTERIES OF THE RETINA IN CONSEQUENCE OF INFLUENZA.

This manifestation has been observed a number of times by M. Galezowski during the last two years, according to his statement made at a meeting of the Biological Society, December 19, 1891. The spasm produces a temporary dimness of vision and an amblyopia, which lasts from ten minutes to some days, but yields to the sulphate of quinine. Examination of the fundus shows that the branches of the arteria centralis are strongly contracted. The amblyopia is purely dynamic, and, perhaps, due to the influence upon the vasomotor nerves of a toxine secreted by the microbe of influenza.—*Le Progrès Médical*, December 26, 1891.

EXPERIMENTAL RESEARCHES UPON IMMUNITY—ABRIN.

Abrin is a very poisonous albumose extracted from jequirity, so like to ricin in its action that the two substances were formerly considered identical. According to the latest publication of Hellin, of Dorpat, this opinion must be abandoned, and the two bodies, however similar, must be looked upon as distinct. The writer has ascertained, from his experiments upon animals, that it is possible to render them immune to abrin. Thus fortified, they offer a stubborn resistance to its local or

constitutional power. This immunity depends upon the fact that the blood contains an antidote—antiabrin—which counteracts the effects of abrin, probably by the destruction of that substance.

The writer surmises that these observations possess a certain interest for practical ophthalmology. He believes that, by beginning with weak solutions of abrin and cautiously increasing the strength, any danger to the eye may be avoided without the curative effect being lost. At least, he was able to produce in rabbits a comparatively rapid amelioration of pannus and prompt repair of ulcers. As regards the strength of the solution, he advises, in the human subject, that it be 1 to 500,000 to begin with, being gradually made stronger. If symptoms of irritation appear in the course of the treatment, it is evident that the strength of the solution has been too rapidly increased. The use of a weaker preparation must then be resumed, and the increase must be more gradual.—*Deutsche Med. Zeitung*, December 3, 1891.

THE SUSCEPTIBILITY OF THIRSTY ANIMALS TO INFECTIOUS DISEASE.

Several authors (Rodet, Morpurgo, Roser, Canalis, and others) have studied the influence of debilitating causes, such as hunger, loss of blood, and fatigue, upon the susceptibility of animals to disease, and have shown that, under these conditions, they become receptive of the carbuncular infection. Drs. B. Pernice and G. Alessi, of Palermo, have extended these researches to animals (fowls, pigeons, frogs, and dogs) deprived of drinking-water. Their principal conclusions are as follow:—

1. Dogs kept without water for three or four days, and then inoculated with the carbuncle bacillus, were afflicted with a decided swelling at the site of inoculation. One which thirsted for eight days perished from carbuncular infection three days after inoculation.

2. Fowls deprived of water for five days, and then inoculated with carbuncle, died in three to six days.

3. Pigeons totally deprived of water for five days, and then inoculated with a culture of carbuncle bacilli, succumbed to the disease in two to six days.

4. A pigeon, which had thirsted for twenty-four hours before being artificially infected, survived the effect of the disease for ten days.

5. Frogs kept out of the water for twenty-four hours before inoculation died within twenty-four hours, while those inoculated immediately after being removed from the water, also died within the same period. When left in the water for twenty-four hours after inoculation, and then kept out, frogs resisted the action of the disease for two days, and perished, without infectious symptoms, in the same manner as others not inoculated,—the subjects of control experiments.

From these investigations, it is evident that the prolonged deprivation of water bestows upon animals which are naturally insusceptible to the carbuncular infection a more or less complete receptivity to that affection. It must, at the same time, be taken into consideration that, in consequence of thirst, the animals consume less solid food, and this double deprivation increases the physical debility, so that the cause of the almost completely overthrown immunity is of a complex nature. The chief factors in the production, by thirst, of receptivity in animals formerly immune consist, on the one hand, in the decrease of the secretions, especially the urine, and, consequently, a retarded or incomplete elimination of bacteria or their toxic products; and, on the other hand, an alteration in the constitution of the blood. This fluid, which normally contains 791 parts of water by weight, is thickened, and the result points to the conclusion that the normal immunity depends especially upon the serum of the blood, without reference to the activity of the living cells (phagocytosis).

These researches teach, on the one hand, the importance of an abundant water-supply to cities, and, on the other, the value in the treatment of infectious disorders, especially typhoid fever, of a sufficient allowance of water.—*Deutsche Med. Zeitung*, December 7, 1891.

BENZOYL-GUAIACOL AS A SUBSTITUTE FOR CREASOTE.

Dr. Walzer remarks that creasote labors under the disadvantage that it soon excites repugnance in patients by reason of the eructations to which it gives rise. A further objection has been made to its use, especially when given in capsules, that, at the spot in the stomach where the capsule is dissolved, a local inflammation is caused by the cresole which the creasote contains. Since this contamination

is present in most specimens of creasote, guaiacol is a preferable agent, as it is almost free of cresole. Guaiacol is present in about the proportion of 60 per cent. in creasote. It must, therefore, be able to take the place of the latter substance, but is open to the same reproach on the score of its odor and taste. Dr. Bongartz, apothecary in Aachen, has obtained a combination of benzoic acid with pure guaiacol, called benzoyl-guaiacol, which is free from cresole, and, moreover, destitute of odor or taste. With this new preparation 10 consumptives have been treated for a considerable period in the Mariahilf Hospital, at Aachen, and the results have been at least equal, if not superior, to those yielded by creasote. Above all, appetite was improved and body-weight increased, while the tubercular symptoms declined. The dose employed was 0.25 to 0.5 (4 to 8 grains), but this amount could be increased to 1.0 (15 grains), three times a day (equal to 1.6 of guaiacol), without ill effects.—*Deutsche Med. Zeitung*, December 10, 1891.

SALOPHEN.

At a meeting of the Berlin Medical Society, December 2, 1891, Herr P. Guttmann said: Salophen is a new chemical combination, produced by the Farbenfabriken, formerly F. Bayer & Co., of Elberfeld. This substance crystallizes in fine, white scales, almost insoluble in water, readily soluble in alcohol and ether, free from taste or odor. According to a communication from the laboratory of Dr. Siebel, it contains 51 per cent. of salicylic acid. In April a sample was placed in the hands of the speaker for therapeutical examination. Upon being heated with soda-lye, salophen is split up into salicylate of sodium and acetylpara amidophenol. Both products of decomposition can be detected by chemical tests. This decomposition takes place also within the organism. From the fact that it contains salicylic acid and is decomposed within the economy, it may be surmised that salophen possesses therapeutical efficacy. Preliminary experiments upon animals showed that it might be administered in the average quantity of 0.4 gramme to 1 kilogramme of body-weight (about 3 grains to a pound avoirdupois). In the case of men, Guttmann began with very small doses, which he gradually increased, until he arrived at the conclusion that it could safely be given to patients in daily doses of 6 to 8 grammes (1½ to 2 drachms). The indications for its employment may be deduced from a knowledge of its composition, viz., in those maladies in which experience has proved salicylic acid and its combinations effective. Observation showed that salophen, in doses of 4 to 6 grammes (1 to 1½ drachms) per day, had a favorable action in acute articular rheumatism. Pain diminishes at the end of twenty-four hours, and lessens more markedly on the second and third days. At the same time the swellings of the joints decrease and motion becomes possible. In some cases, improvement was so rapid that all manifestations had disappeared at the end of a few days. Others, however, demanded weeks and months for their cure. Salophen is unable to prevent relapse in joints which had improved, nor extension of the disease to articulations previously unaffected.

The antipyretic power of the remedy is but slight. As much as 4 to 6 grammes must be given within a period of 4 hours, in order to reduce the temperature 1° to 1½° C. in high, continued fever,—as, for example, typhoid fever. In other fevers, smaller doses are active. In phthisis, for instance, the exhibition of 3 to 4 grammes causes a reduction. Its antifebrile properties do not run parallel with its antirheumatic influence. Salophen is less beneficial in chronic articular rheumatism. Guttmann has used this substance in 2 cases of cystitis. In one of these no improvement followed, and in the other its administration was conjoined with irrigation of the bladder. It was tried in 2 cases of sciatica, in one of which it produced a good result, while in the other it was without effect. It was employed in 2 cases of trifacial neuralgia, on one of which it made but a transient impression. We may say, therefore, that salophen is a serviceable remedy in acute rheumatism, and may be of use in chronic articular rheumatism and other rheumatic affections. The dose ranges from 4 to 6 grammes daily until the pain is ameliorated, when the amount may be somewhat reduced. Even in 6- to 8- gramme doses, it has been free from evil consequences. —*Deutsche Med. Zeitung*, December 10, 1891.

AUTO-INTOXICATIONS.

In an address on this subject before the Italian Congress of Internal Medicine, held at Rome, October 19–22, 1891, Professor

Albertoni announced the following conclusions as a result of his studies: 1. Toxic substances are constantly being formed in the human organism. 2. The principal place of their development is in the intestine, especially the large intestine, while to a less degree they originate in the muscles, glands, and other tissues. 3. The most familiar example of a process due to auto-intoxication is putrefaction. 4. The best known toxic substances are: peptotoxin; organic bases (leucomaines, ptomaines); products of the aromatic series (indol, skatol, phenol, aromatic acids, etc.); lactic acid, volatile fatty acids, ammonia, methan, sulphuretted hydrogen, methylmercaptan, and aceton. 5. Many of these substances are incessantly produced in the normal state, although in small quantities and varying in individuals. 6. The mechanisms by which the effect of these intoxications is limited or the system is protected against their action are: in the gastro-intestinal the presence of hydrochloric and other acids, glucose, etc.; in other portions of the organism the destruction of toxic materials by oxidation and their rapid elimination. 7. Every condition which disturbs the protective influence of the aforesaid mechanisms may be the origin of an auto intoxication; among such conditions may be instanced, above all, diseases of the intestinal tract, those which diminish the exchange of oxygen, as anæmia and chlorosis, and those which occasion a violent destruction of tissue. Diseases of the secretory or eliminating organs continually produce indirect auto-intoxications. 8. Fatigue, hardship, insolation, and fasting lead to auto-intoxication in consequence of increased and abnormal production of retrograde material, which cannot be rapidly enough eliminated and transformed. 9. Many pathogenetic microorganisms may originate a secondary auto-intoxication in so far as by their growth they may elaborate specific poisons from various tissues. 10. The general diagnosis of auto-intoxication depends especially upon the discovery of definite toxic substances in the urine, fæces, fluid secretions, or tissues. From this point of view, the detection in the urine of sulphuric acid, phenol, indican, acetone, ammonia, diamin, alkaloids, peptones, or oxybutylic acid has already acquired a decided significance. The toxicity of the urine has not become of sufficient importance, though it has proved of value in some cases. 11. In most of the forms of auto-intoxication which have been studied, the substances derived from the retention of the biliary and urinary constituents take part in producing the condition. Such are the acids derived from the aromatic substances, and which have a neuro-paralytic effect, diamin, the origin of obscure cystitis, and acetonæmia. 12. Auto-intoxication is generally observed as a complication of disease. This fact is difficult to explain. 13. A fundamental question in the comprehension of auto-intoxication and of tissue-change in general, is that relating to the anaërobic origin in the interior of the tissues, as shown in the putrefactive decomposition of toxic products, and in what manner the exchange of oxygen influences the process of auto intoxication. 14. The detection of aceton is of more importance as an index of the presence of an intoxication process than on account of its own toxicity. 15. The toxines merit a careful study in reference to the agencies which render auto-intoxication possible.—*Deutsche Med. Zeitung*, December 14, 1891.

CARDIAC AFFECTIONS IN ACUTE MALARIA.

Much contrariety of opinion prevails among high authorities in regard to the frequency or even the occurrence of heart disease in malaria. While Duroziez has seen 20 cases of valvular disease induced by paludal influence, and Lancereaux has had a similar experience, Laveran denies a causal connection between periodic fever and disease of the heart. Ranzier now declares that in 57 cases of intermittent he has, in 17 cases, detected cardiac involvement. "In individuals prone to malarial attacks, we may often detect a cardiac disturbance, that may escape notice unless sought for; it consists in a systolic murmur at the apex, may be accompanied by œdema, and depends upon a functional insufficiency of the mitral valve, which, in its turn, through the influence of the malarial poison, affects the papillary muscles."—*Deutsche Med. Zeitung*, December 17, 1891.

THE OCCURRENCE OF HERPES ZOSTER DURING TREATMENT BY ARSENIC.

Neilsen has examined the statistics of the Copenhagen Hospital in regard to this subject. He found that from 1864 to 1889 the number of patients treated for psoriasis was 777. Of these, 557 were upon arsenic for a greater or less period, while 220 received no arsenic, but had large doses of iodide of potassium. Herpes

zoster occurred in 10 cases of those to whom arsenic was given, *i.e.*, in 1.8 per cent., while no eruption of zoster was found in those who received no arsenic.—*Deutsche Med. Zeitung*, December 17, 1891.

THERAPEUTIC NOTES.

OINTMENT FOR HÆMORRHOIDS.

℞ Antipyrin,
Salol, ... āā grm. 2.
Extr. belladonn, . . grm. 0.10
Vaselin., ... 15.
Ceræ, ... q. s.
M. Sig.: A piece, the size of a nut, to be introduced within the anus thrice daily.

PRURIGO.

℞ Acid. carbolic. crystall., . 2.
Alcohol., ... 10.
Glycerin., ... 20.
Aq. dest., ... 200.—M.

Or,

℞ Chloral. hydrat., . . . 3.
Alcohol., ... 20.
Aq. dest., ... 30.—M.

—Hillauet and Gaucher, *D. Med. Zeitung.*

URTICARIA.

For the atrocious itching of this disease, Quinquaud prescribes the following lotion:—

℞ Acid. boric., . . . 30.
Chloral. hydrat., . . 5.
Aq. dest., ... 180.—M.

HERPES PRÆPUTIALIS.

A dusting-powder employed by Besnier is:—

℞ Acid. tannic. pulv., . . 5.
Bismuth. subnitr., . . 1.
Amyli, ... 100.

HYPERIDROSIS.

℞ Sodii borat.,
Acid. salicyl., . . āā 7.5
Acid. borici, . . . 2.
Glycerin.,
Alcohol., . . . āā 30.
M. ft. linim.
Apply to hands thrice daily.

COMEDONES.

Blondel's formula is as follows:—

℞ Magister bismuth.,
Acid. boric. pulv., . . āā 3.
Rad. ratanh. pulv., . . 1.
Tragacanth, ... 2.
M. A dusting-powder.—*D. Med. Zeitung.*

EARACHE.

When due to inflammation of the external meatus, it is well to scarify first, and then to make use of aural suppositories or tampons, about one-third inch long, and composed of:—

℞ Morphin. sulph.,
Cocain. hydrochlor., āā cgm. 10.
Gelatin., ... grm. 90.—M.

Or, the canal may be irrigated by 6-per-cent. solutions of cocaine, or 20 per-cent. solution of carbolic acid in glycerin.—*Giornale Internatz. delle Scienze Med.*

ARISTOL.

As a perfect substitute for iodoform, aristol has gained an enviable position in recent therapeutics. But it has surpassed iodoform in so many respects, that the two applications must now be regarded more independently. Aristol has a much wider range than iodoform.

In very large surface lesions, for instance, in which it would be dangerous to use iodoform, aristol may be employed with perfect impunity. So, also, in maladies of the natural cavities, aristol is not only a safe application, but it has the property of adhering to mucous surfaces. In burns, and in ulcerations of every description, aristol acts admirably. In all external traumatisms with exposed surfaces aristol is the most convenient, most agreeable, and the safest of dressings. It is used in all the forms of preparations demanded by modern surgery. Aristol gauze is especially acceptable to surgeons. Quite recently aristol has been employed hypodermatically in phthisis.

PHENACETINE-BAYER.

In these days, when influenza, in its protean forms, is likely to come suddenly upon us at any moment, it is well to remember the splendid services of this medicament in the condition cited. Combined with salol, it holds the first place in the list of remedies for the dreaded *grippe*, soothing the nervous condition, lowering the temperature, and dispersing the pain. Phenacetine-Bayer should be tried in all acute febrile conditions. Its action is so prompt, safe, and effective, and the relief it determines is so well-marked and continuous, that it is daily growing in popularity with the practitioner. In all rheumatic and rheumatoid conditions Phenacetine-Bayer is also a most valuable remedy, while in the neuralgias and migraine it is, without doubt, our best analgesic.

SULFONAL-BAYER.

Sulfonal retains its high position as a hypnotic in all forms of insomnia, except in those dependent upon pain. Sulfonal is neither an anodyne nor a narcotic. It is hypnotic, pure and simple, and gives that effect, and that only. It is in all respects safe; it gives rise to no gastric or other disturbances, and causes no drug habit. In cases in which insomnia, with pain, is to be treated, a very advantageous combination may be made with Sulfonal-Bayer and Phenacetine-Bayer. In simple insomnia, sulfonal alone is all that is required. Care must be used to administer it according to directions; for, unlike the narcotics, it procures sleep by soothing the patient and not by stupefying him. In all nervous conditions sulfonal is useful, and in many of them it is curative. In the symptomatic treatment of insanity sulfonal has received the highest commendation from alienists.

SUPRA-ORBITAL NEURALGIA.

As a local remedy, Cohen recommends:—

℞ Camphoræ,
Chloral. hydrat., . . p. æqual.

COUGH OF PHTHISIS.

Professor Pepper states that inhalations are to be preferred in the paroxysms of cough. He has found the following formula of service:—

℞ Creasoti, ... ℥j.
Tr. iodi., ... ℥iij.
Chloroform., . . . ℥ij.
Sp. vini rect., . q. s. ad ℥j.
M. Sig.: Inhale 10 drops.

Carbolic acid, in somewhat smaller dose, or thymol may be substituted for the creasote, and tincture of conium for the chloroform.

PRURITUS.

℞ Menthol, ... 4 grms.
Alcohol, ... 30 grms.
Water, ... 60 grms.
Acetic acid, . . . 150 grms.
M. Sig.: Apply with a sponge.—*Le Progrès Médical.*

MENIERE'S DISEASE.

Professor Charcot advises the following plan of treatment: In the administration, twice daily, at meal-time, of 40 centigrammes (about 6½ grains) of quinia sulphate,—80 centigrammes (about 13 grains) per day; this is continued for fifteen days. The medicine is then discontinued for eight days, and is then resumed in the above-described manner. Usually, after four or five such periods of administration, with their intervals of discontinuance, a cure is obtained. Under the influence of this medication there is, sometimes, at the outset of the treatment, an exaggeration of the noises in the ears and of the vertigo; but improvement takes place very soon.

DIPHTHERIA TREATED WITH CYANIDE OF MERCURY.

M. de Reulle has treated 8 cases of diphtheria with cyanide of mercury, in all of which, with 1 exception, his treatment has been successful. The formula he used was as follows:—

℞ Cyanide of mercury, . . $\frac{1}{12}$ grain.
Rectified spirits of wine, . 2 drachms.
Distilled water, . . up to 6 ounces.
Sig.: One teaspoonful every hour.—*Prov. Med. Jour.*

DIABETES.

The following mixture is praised by Vigier:—

℞ Lithii carbonat., . . . 30 grains.
Sodii arseniat., . . . 1 grain.
Ext. gentianæ, . . . 15 grains.
M. et div. in caps. no. xx.
Sig.: Take one capsule morning and evening.

INJECTION FOR OZÆNA.

The following is Sidlo's formula:—

℞ Potass. chlorati, . . 6.
Glycerini, ... 30.
Aquæ destillat., . . . 300.
M. To be injected, several times daily, in ozæna. Small rolls of cotton wet with a solution of glycerin (1 in 3) are also introduced thrice daily, and allowed to remain for one hour each time.

PRURITUS ANI.

Dr. Joseph M. Matthews has obtained excellent results from:—

R Benz. oxide zinc oint.,
Campho-phénique, . āā ℥ss.
M. Apply as often as necessary.

The campho-phénique may likewise be used pure, without detriment to skin or mucous membrane.

CREASOTE IN TUBERCULOSIS.

Professor Sommerbrodt, to whom we owe the introduction of the creasote treatment of tuberculosis, has recently made some further communications on the value of the method. On the basis of 12 new and partly severe

cases, he confirms the judgment he previously gave expression to, and lays particular weight upon the dosage, laying it down as a general principle that "the more creasote *pro die* can be borne so much the better the action" He increased the quantity taken daily to nearly 1 drachm (3 to 6 grammes), without observing any ill effects, even when continued for prolonged periods. The best form of administration is, according to Sommerbrodt, in capsules, with the addition of a readily-absorbed fat, as codliver- or olive- oil. He regards as quite unfounded the fear that the remedy may produce an ill effect upon the digestive organs, having known patients who have taken 5000, 10,000, or 20,000 capsules without suffering, as regarded the appetite. As a matter of course, good and reliable preparations must be employed.—*Prov. Med. Journ.*

ICHTHYOL IN PLEURITIC EXUDATION.

With reference to the internal use of ichthyol, Dr. A. Mueller records a case of pleuritic exudation in which, after all other remedies had failed, pain was permanently removed, and the absorption of the exudation made steady progress.

TUBERCULOSIS.

Professor Pepper speaks favorably of the following combination as a constitutional remedy:—

℞ Creasoti, ... gtt xxxij.
Tinct. gentian. co., . . ℥j.
Tinct. nucis vomicæ co., . ʒij.
Spt. vini gallici, . . . ℥ij.
Glycerini, ... ℥j.
Vini xerici, ... Oj.
M. Sig.: A dessert to two tablespoonfuls.

AN OINTMENT FOR REMOVING THE DARK COLOR IN ACNE PUNCTATA.

According to Leistokon, excellent results have been recently observed from the employment of peroxide of hydrogen for decolorizing the small sebaceous plugs. Unna, who has shown that the color is not due to dirt but to a fungus, prescribes it in the following formula:—

℞ Lanolin, . . . 10 parts.
Vaselin, . . . 20 parts.
Solution of peroxide of hydrogen, . 20–40 parts.

If the "blackheads" be complicated with papules and pustules, he recommends the employment of sulphur or sublimate for the removal of the latter.—*Monatsh f. pract. Dermat.; Prov. Med. Journ.*

PERSISTENT DANDRUFF.

The following preparation has been found useful by Dr. Stephen:—

℞ Resorcini,
Ol. olivarum,
Ætheris sulph., . . āā ʒiij.
Spt. vini rect., . . . ℥viss.

To be well shaken, and applied to the scalp by a bristle-brush, about twice as large as the ordinary mucilage-brush, by insinuating it with the locks of hair. The head to be well washed with soap and warm water twice a week.—*Weekly Med. Review.*

DYSENTERY.

Rossback recommends:—

℞ Naphthalin, . . . gr. x.
Boiling water, . . . ℥iv.
Decoction of marsh-mallow, Oj.

This is to be used as an injection at the temperature of 100 degrees.

NERVOUS COUGH.

Professor Bartholow prescribes:—

℞ Acidi hydrocyanic. dil., . ʒj.
Tinct. sanguinariæ, . . ℥ss.
Syr. senegæ, . . . ʒiv.
Aquæ laurocerasi, . . ʒvij.
Syr. tolu, ... ℥ij.
M. Sig.: From 10 drops to a teaspoonful every four hours, according to the age of the patient.

WHOOPING-COUGH.

Dr. Robertson praises the action of pure benzole, giving to a child 6 months old 2 minims in mucilage, and 5 minims in mucilage, on sugar or in capsule, to adults.—*Lancet.*

Dr. John M. Currier, of Newport, Vermont, orders the following powder, to be used by insufflation four or five times a day, or oftener in severe cases:—

℞ Hydrarg. chlorid., corros., gr. j.
Pilocarpinæ, . . . gr. x.
Cocainæ hydrochlorat., . gr. xv.
Ammonii chlorid., . . ʒiiiss.

The ingredients should be very finely pulverized.

ACNE.

In acne of persons with feeble digestion and torpid bowels, 10 drops of fluid extract of hydrastis Canadensis, thrice daily, has proven of service.—*Med. Standard.*

HELENINE IN LEUCORRHŒA.

Helenine is said to exert a marked effect upon the glands of the cervix uteri, and to be a valuable remedy in leucorrhœa due to catarrhal endometritis. It is given in daily doses of ¾ grain, combined with iridin and sugar of milk. It occasions no ill effects except, sometimes, diarrhœa and colic.—*Journ. de Médecine.*

GONORRHŒA.

The following is said, by P. Thierry, to be a very useful injection in the acute stage:—

℞ Iodoform, ... 10 grms.
Ol. amygdalar. dulc., . . 60 grms.—M.

The injections should be made thrice daily, the patient being placed in the dorsal position, and retaining injection ten to twenty minutes.

The first injection should be made by the physician. Pains disappear after first injection, and cure takes place in twelve days.—*La Semaine Médicale.*

BRONCHIAL ASTHMA.

℞ Iodide of ammonium, . ℥ij.
Fl. ext. grindelia robusta, . ℥ss.
Fl. ext. glycyrrhiza, . . ℥iv.
Tinct. lobelia,
Tinct. belladonna, . āā ℥ij.
Syr. tolu, . . q. s. ad ℥iv.

Sig.: Teaspoonful three times a day; extra doses during a paroxysm.

BRONCHIAL CATARRH.

℞ Acet. scillæ, ... ℥ss.
Ext. ipecac., . . . f℥ss.
Tr. opii deod., . . . ℥j.
Syr. tolu, ... ℥x.

M. Sig.: A teaspoonful every two, three, or four hours.—BARTHOLOW.

STRONTIUM LACTATE IN ALBUMINURIA.

Dr. Dujardin-Beaumetz has (Bull. Med.) found strontium lactate of benefit in albuminuria. He prescribes a diet of vegetables, milk, and eggs at the same time. The following formula is employed:—

℞ Strontium lactat., . . ℥xij.
Aquæ destil., . . . ℥lvj.

M. Sig.: One drachm morning and evening.—*Med. Standard.*

INHALATION FOR DIPHTHERIA.

An Australian physician recommends the inhalation of the vapor of carbolic acid, eucalyptol, and turpentine.

FOR CHAPPED NIPPLES.

In the treatment of chapped nipples, Vinay has employed, successfully, the following formula:—

℞ Aristol, ... 4 grms.
Liquid vaselin, . . . 20 grms.

M. Sig.: To be locally applied.—*Le Bulletin Médical.*

DIABETES MELLITUS.

Delafield gives the following:—

℞ Acidi arseniosi, . . . gr. $\frac{1}{30}$.
Ipecac. pulv., . . . gr. $\frac{1}{30}$.
Rhei pulv., . . . gr. $\frac{1}{50}$.

M. Sig.: To be taken three times a day.—*Med. and Surg. Rep.*

INHALATION FOR WHOOPING COUGH.

Beall recommends, as inhalation for the treatment of whooping-cough, the following mixture:—

℞ Thymol, . . . 1.20 grms.
Phenic acid, . . . 15.00 grms.
Essence of sassafras,
Essence of eucalyptus,
Essence of turpentine,
Liquid tar, . . āā 7.50 grms.
Ether, . . . 4.00 grms.
Alcohol, . q. s. to 90.00 grms.

M. Sig.: About 30 drops of this mixture are placed on a handkerchief, and the child made to inhale it. This application is to be repeated every two or three hours.—*La Médecine Moderne; Med. and Surg. Rep.*

FOR CHRONIC PHARYNGITIS.

A writer in L'Union Médicale du Canada speaks favorably of:—

℞ Ergotine, ... gr. xv.
Tincture of iodine, . . ℥j.
Glycerin, ... ℥j.

M. Sig.: To be applied three times a day by means of a brush.

FOR ASTHMA.

The following mixture, to be inhaled during an asthmatic attack, is of value:—

℞ Ether, ... ℥j.
Essence of turpentine, . ℥j.
Benzoic acid, . . . ℥iv.
Balsam of tolu, . . . ℥ij.

M. Sig.: Use as indicated.—*L'Union Médicale du Canada.*

INTESTINAL CATARRH OF CHILDREN.

In persistent diarrhœa, with green stools, Zinnis administers:—

℞ Infus. rad. columbo, . . 75 grms.
Bismuth. subnitr., . . 3 "
Syr. aurant. flor., . . 15 "
M. Sig.: Two coffeespoonfuls every two hours.—*Archiv f. Kinderh.*

PHENOCOLL HYDROCHLORATE IN MALARIA.

Professor Albertoni, of Bologna, makes a very important communication relating to the use of phenocoll hydrochlorate in malaria. Professor Albertoni states that he has carefully and extensively employed the remedy in his practice, and that the most excellent results were effected in a number of severe malarial cases.

EXPECTORANT MIXTURE.

Dr. H. C. Wood has found the following combination serviceable:—

℞ Ammonii chloridi, . . ʒij.
Apomorph. hydr., . . gr. j.
Mist. glycyrrh. comp.,
Syrupi, . . . āā ʒxij.
M. Sig.: Dessertspoonful every two or three hours.

DIARRHŒA.

℞ Salol, ... ʒij.
Bismuthi subnitratis, . . ʒiv.
Mist. cretæ, . q. s. ad ℥iij.
M. Sig.: One teaspoonful every two hours.

EARACHE.

An earache cure, recommended by a German medical journal, is made as follows:—

℞ Chlorinated camphor, . 5 pints.
Glycerin, ... 30 "
Oil of sweet almond, . . 10 "
Mix and moisten cotton, and place in the ear. —*Cincinnati Medical News.*

ACUTE BRONCHITIS.

℞ Vini ipecacuanhæ, . . ʒij.
Liq. potassii cit., . . ℥iv.
Tinct. opii camphorat.,
Syrup. acaciæ, . . āā ℥j.
M. Sig.: A teaspoonful, thrice daily, in the first stage of ordinary bronchitis.

AMMONIUM SALICYLATE is said to be an excellent expectorant.

IT is said that the odor of iodoform may be readily removed from the hands and utensils by washing with an aqueous solution of tannic acid.

ENEMA.

Dr. C. P. Noble recommends the following:—

℞ Sulphate of magnesium, . ℥ij.
Glycerin, ... ℥ij.
Oil of turpentine, . . ʒiv.
Water, ... ℥ij.—M.

PEROXIDE OF HYDROGEN.

The following formulæ are from Dr. B. W. Richardson's Asclepiad:—

For Fermentative Dyspepsia.

℞ Solut. hydrogenii peroxidi (10 vols.), . . . ℥iiss.
Spiritus vini rectificati, . ℥iij.
Ol. creasoti, . . . ♏vj.
Glycerini puri, . . . ʒvj.
Aquæ destillatæ, . . ad ℥vj.
Misce. Fiat mistura.
Dose, f℥j.

For Hæmoptysis and Other Hæmorrhages.

℞ Solut. hydrogenii peroxidi (10 vols), . . . ℥iiss.
Tannin, ... ʒiss.
Glycerini puri, . . . ʒvj.
Aquæ destillatæ, . . ad ℥vj.
Misce. Fiat mistura.
Dose, f℥j.

An Antiseptic and Astringent Gargle.

℞ Tannin (pure), . . . gr. x.
Glycerin (pure), . . ℥j.
Rectified spirit, . . . fʒiv.
Distilled water, . . . fʒiv.
Solution of peroxide of hydrogen (10 vols.) sufficient for 8 fluidounces.
To make an 8-ounce gargle, to be used in the manner directed.

A Useful Collyrium.

℞ Solution of peroxide of hydrogen (10 vols.), . . ʒiv.
Tannin (pure), . . . gr. v.
Rose-water . . to fʒviij.
To make an 8-ounce collyrium, to be used in the manner directed.

A NEW BORATED PREPARATION.

For the treatment of wounds and aural suppurations, Dr. Jaenicke, of Görlitz, considers the ordinary 3- to 4-per-cent. boric-acid solution as not sufficiently strong. He has, accordingly, availed himself of a solution of equal parts of boric acid and borax, made by heating together with an equal weight of water until the boiling-point is reached. The cold, saturated solution contains 16 per cent., *i.e.*, is four times the strength of the boric-acid solution.

THE
Medical Bulletin.

JOHN V. SHOEMAKER, A.M., M.D., Editor.
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Philadelphia, Feb., 1892.

THE RECENT EPIDEMICS OF INFLUENZA.

THIS curious affection, though no unknown stranger, was new to many of the profession when it first made its appearance in this country in the winter of 1889. References occur in the scanty historical records of the Dark and Middle Ages to epidemics of cough, which were probably influenza, but our first authentic description of the disease dates from the early part of the sixteenth century. Then, as in these later days, it invaded Europe from the south-east, and spread rapidly through the Continent, finally reaching the British Islands and Scandinavia. The first knowledge which we have of its spread to the Western Continent relates to the epidemic of 1647.

There is something apparently very erratic in the origin and dissemination of epidemics. Doubtless, these outbreaks would seem less strange to us were we better acquainted with the conditions which give them birth. We cannot doubt, however, that although we are unable to distinguish definitively the causes which influence the use and spread of influenza, yet the phenomena nevertheless depend upon the operation of immutable natural laws. It has been observed that, after an absence of a score or more of years, influenza re-appears in epidemic form in two or three successive or alternate years. The rapidity of its rise and extension place it in the category of infectious disorders, and we have every reason of analogy to believe that what has been demonstrated as true of some of these applies as well to influenza, viz., that its genesis depends upon the activity of a micro-organism. The microbes which give rise to infections are capable of remaining dormant for a long time, until placed in conditions favorable to their evolution, when they suddenly become virulent. We are, unfortunately, yet upon the threshold of knowledge concerning the conditions which govern the activity of the exciting causes of epidemic diseases. We believe that influenza is caused by a specific micro-organism; the existence of such a parasite, it is claimed by some, has been demonstrated.

The following view upon this subject, as set forth by the British Medical Journal of January 9th, conveys about all that we know upon the bacteriology of influenza:—

"Our Berlin correspondent writes that Dr. Richard Pfeiffer, director of the scientific department of the new Koch Institute, has succeeded in isolating an extremely small, rod-shaped bacillus, which he finds to be the constant companion of influenza, and which is communicated by the respiratory organs. The reported discovery cannot, however, be received with entire confidence, inasmuch as it is well known that there is not one influenza bacillus, but many. Some investigators have, like Babès, isolated all the bacilli and cocci observed in the secretion of patients suffering from influenza and in the organs of persons who have died from the affection. These scientists detected the presence of a considerable number of microbes. Some of these bacilli were pathogenous, and killed the animals inoculated with them; but it was impossible to say which particular microbe among the number was the true morbid agent in influenza. Some investigators consider the bacillus they found more abundant than others in the bronchial secretion to be the active agent; others have sought for a special microbe in the blood, and have described a hæmatozoon, resembling that of intermittent fever, described by Laveran. None of these researches have been confirmed by other scientific workers, and the atmosphere of doubt that envelops the results of Dr. Pfeiffer's experiments can only be cleared away by a careful examination of the details. Six successful inoculations cannot be accepted as conclusive proof that the real cause of so rapid and so contagious a disease as influenza has been discovered."

Influenza differs from many other infectious fevers, notably the exanthemata, in that one attack is very far from conferring immunity against a subsequent seizure.

The disease of which we write exhibits a wide variation as regards its symptomatology. It begins with chilly sensations, or with a pronounced chill, which is followed by a

continued fever and various catarrhal manifestations; but neither the fever nor the catarrh exhibit distinctive peculiarities. The former is self-limited as to duration, but has no characteristic temperature-curve. In some cases it subsides within a week, while in others it may continue until the second or even third week, and suggest the presence of typhoid fever. The catarrh may limit itself to the upper air-passages, may invade the bronchi, and extend to pulmonary lobules, or it may be confined to the gastro-intestinal mucous membrane. Again, perturbation of nervous function may be the marked feature of a case. Thus, three chief forms of influenza have been recognized. In the respiratory variety we meet with coryza, pharyngitis, tonsillitis, laryngitis, bronchitis, and broncho-pneumonia, while in the gastro-intestinal form the catarrhal inflammation announces its presence by frequent vomiting and diarrhœa. The initial period is usually accompanied with rheumatoid pains in the limbs and joints, sometimes even with slight swelling of the articulations. Headache is oftentimes very severe. Occasionally, active cerebral congestion is marked, and is relieved by spontaneous epistaxis. But, whatever divergence of symptoms may be remarked in different cases, one manifestation always commands attention,—the decided nervo muscular prostration. This symptom marks the case from the beginning, and is the most constant and typical feature in the com plex clinical picture. The cardiac action loses vigor, and the pulse, even at an early period, may be very slow as well as weak. The disease is apt to spare children, although the exceptions to this statement are frequent. The catarrh may, by extension, implicate the middle ear. In the nervous form, delirium or transitory mania may be manifested. Though thoracic complications are the most general, symptoms have been observed, in certain cases, which pointed to lesions of the cerebro-spinal system.

Dr. Frank Woodbury, of this city, observed, recently, in the post mortem of a case, the lesions of diffuse lepto-meningitis, with exudation, both on the convexity and base. The poison of the disease exerts an especially depressing influence upon the function of nervous matter. Consequently, debility is the symptom *par excellence* of the attack, and the depression of nervous force is often so profound as to lay the foundation of grave sequelæ affecting the nervous system itself, or the nutrition of various organs, through the impairment of their innervation or through altered vasomotor action. Though uncomplicated, influenza, in previously healthy adults, rarely proves fatal; yet the complications are often the cause of death, more particularly in aged people and in those previously debilitated.

One more complication demands mention, and that is renal involvement, with albuminuria, which is by no means uncommon. Congestion or inflammation of the kidney may occur during the course of the disease, and may lay the foundation of morbus Brightii. One of the most severe cases seen by the writer, during the prevalence of the epidemic of 1889–90, has been followed by persistent cardiac irregularity, spinal weakness, and albuminuria.

No characteristic rash accompanies influenza, but sometimes, owing to the involvement of the mucous membrane, an erythema, eczema, and urticarial eruption may take place. Contrary opinions are expressed by different writers as regards the contagious character of the malady. Undoubtedly, the majority of patients contract the disease from a common cause, and not from each other; yet instances are by no means lacking which prove that influenza may be spread by contagion, and that its virus may be conveyed by fomites.

In the treatment of the affection under consideration, our objects, briefly stated, should be, first and above all, to conserve strength; in addition, we should strive to promote the activity of the excretory organs, to alleviate pain, to moderate fever, and, as far as possible, to check local catarrhs by local applications. It is of prime importance that a patient should early acknowledge that he is ill. He who strives "to fight it off" almost invariably aggravates his attack, is compelled at last to do what he should at first, and establishes a tendency to the occurrence of some complication. The aching pains yield most readily to phenacetin, which the writer is accustomed to give in the dose of 2 or 3 grains, re-

peated, at intervals of two hours, until the desired effect is obtained. From two to four doses have usually been sufficient. No ill effects usually result from the same dose of phenacetin. Some prefer to give larger doses of this drug, at longer intervals. Others, again, praise a combination of phenacetin and salol, 2 or 3 grains of each, repeated. Antipyrin, as a rule, should be avoided, and the same might be said of acetanilid or antifebrin. Phenacetin is by far the safest of these three agents. Moreover, but few doses are usually required, when the drug can be replaced by tonics, especially small doses of strychnine or nux vomica. Phenacetin has also the advantage of acting upon the skin. Quinine generally has but little effect upon the muscle-pains. Salicylate of sodium sometimes affords relief, but often fails. The citrate of potash is an acceptable remedy when the fever calls for any special treatment. The cough usually requires some palliative measures. We should make choice of the stimulating expectorants, the chloride of ammonium being one of the best. The carbonate of ammonium is valuable when the bronchitis descends to the smaller tubes. In this case it should be accompanied by judiciously free alcoholic stimulation. Camphor and turpentine are efficacious in this unfortunate complication. The cough is often of a nervous type,—out of all proportion to the grade or period of the inflammation. Paroxysms sometimes occur which bear a marked resemblance to those of whooping-cough. The bromide of ammonium in syrup of wild cherry has been found beneficial in such a case. When the cough is severe and distressing and the expectoration viscid, terpene hydrate will be found to serve a good purpose, being given in 2- or 3-grain capsules every two or three hours. This substance is a stimulating expectorant, and also exerts a stimulant action upon the system at large. Eucalyptus is likewise a good remedy. Bronchopneumonia is to be managed upon the general principles applicable to that disease when primary, never forgetting that a secondary process is always more dangerous than a primary, and never forgetting the peculiarly debilitating effect of influenza *per se*. Gastro-intestinal inflammation calls for special treatment. Bismuth, minute doses of calomel or creasote, milk and lime-water, iced champagne, will generally allay vomiting. The diarrhœa may be controlled by the usual means, which need not here be repeated. An opium and tannic-acid suppository may be used if the stomach is intolerant. Atomization with creasote or peroxide of hydrogen is decidedly beneficial for the rhinitis and laryngitis. In all cases, and all through the case, the heart should be carefully watched, and any tendency to failure be combated by strychnine, digitalis, camphor, strophanthus, alcohol, or ammonia.

TARPON SPRINGS AS A WINTER AND HEALTH RESORT.

THE exactions of commercial, professional, or social life render rest, recreation, travel, change of scene and climate peculiarly grateful and beneficial. There are many brain-workers scattered through the cities of the North and West who are comparatively well, and capable of accomplishing much useful work during the milder portions of the year, but who can ill bear the humidity, variability, or rigors of our winters. Neuralgia, catarrhs or indigestions inflict physical and mental suffering upon people of this class, and cause the loss of much time, which might otherwise be devoted to productive labors. To such individuals, an annual migration to the South simply means added bodily and mental efficiency and added years of life. Nothing broadens thought more than travel. Books, to be sure, do this for the student, but observation of nature, human and external, is worth more than the perusal of books. Temporary sojourn in a strange city, State, or land advances both physical and intellectual well-being. The convalescent from acute and exhausting ailments; the sufferer from slowly progressive maladies; those who are in an early stage of tubercular disease, may be restored to health or markedly benefited by a resort to the climate cure.

Americans, assuredly, need not go abroad in pursuit of health and pleasure. The interests of business or historical associations lead us to Europe, Egypt, the Holy Land, or the remoter Orient. But in our own country, of

continental extent, we find every element of the beautiful, the picturesque, and the sublime. We find, also, every variety of climate.

One of the most interesting of our States is Florida,—the land of flowers, the El Dorado, the mysterious land in which sprang the fountain of youth, according to the myths poured into the ears of its Spanish discoverers. The Western or Gulf Coast of Florida has until lately been neglected by tourists and health-seekers. It is in reality, however, as we have personally had the opportunity of observing, preferable to the Atlantic Coast in several important respects. Tarpon Springs, a thriving settlement upon the West Coast, is a *beau ideal* winter residence, either for those in health or invalids. Situated in Hillsborough County, under the twenty-eighth degree of north latitude, it derives its name from a beautiful sheet of water which covers several acres, and is fed by one of those subterranean streams which flow through the cavernous limestone forming the foundation of the peninsula. The lake communicates by a bayou with Clearwater Bay, two miles away, a large inlet from the Gulf of Mexico. All these bodies of water abound with fish of many species, so that the fishermen need never be idle. The tarpon and green turtle are found in the waters of the bay. Florida is celebrated for the number and variety of its birds. Songsters enliven its forests, while land and aquatic birds furnish game for the sportsman. Bathing, sailing, shooting, and fishing are pleasant and invigorating modes of passing time. The atmosphere is remarkably pure, being preserved in an aseptic condition by the aromatic and balmy exhalations of the forests of pine and cedar to the east and the briny currents which flow from the west. Lake, bayou, gulf, virgin forest, combine to render this region of country most interesting to well or ill. The soil is, under the influence of water, very productive. Oranges, potatoes, peas, tomatoes, and Indian corn flourish luxuriantly. With fish, game, vegetables, and fruit so abundant, the table may be spread with dainties to satisfy an epicure.

The average winter temperature is between 65 and 70 degrees, and, though so near the gulf, the atmosphere is comparatively dry, as shown by the records of the United States Signal Station.

Constant exercise in the open air, a variety of healthy amusements suited to all temperaments and constitutions,—the invalid dame, the jaded man of affairs, the consumptive youth, the vivacious maiden, and the sturdy man of middle-age,—are calculated to restore disturbed health of body or mind. The choice of a health resort is a complicated problem. The valetudinarian for whom the selection is made must, undoubtedly, be the person first to be considered. It is no less certain, however, that a place which is attractive to those in sound as well as in impaired health possesses every attribute of a sanitarium. These advantages we find at Tarpon Springs. Families may reside here during the winter months with perfect satisfaction to every member.

The place of which we write is excellently adapted to retarding or checking the progress of tuberculosis, provided, of course, that the disease be not too far advanced. Increased respiratory activity and oxygenation of the tissues, sharpened appetite, and improved digestion are powerful factors in limiting further advance. Scrofulous affections of gland and skin are very decidedly ameliorated. The course of suppuration is abridged, and unsightly scars are, consequently, less frequent. Many diseases of the skin are cured by a sojourn at the Springs. Seborrhœa, acne, sycosis, eczema, pemphigus, disorders of the perspiratory functions, lichen planus, herpes zoster, furunculosis, urticaria, purpura, and the syphilides are very beneficially affected by the local influences. Anæmia, chlorosis, amenorrhœa, neuralgia, neurasthenia, melancholia, and hypochondriasis are other diseases in which improvement results. The same may be said of chronic catarrh of the air-passages. The mild and equable climate is of striking advantage to the sufferer from chronic rheumatism. As the functions of the skin are promoted by the out-door life, the kidneys are less strained,—a fact of great importance to the subject of Bright's disease or pyelitis.

Tarpon Springs is easily accessible from any Northern or Western city. An excellent hotel, fitted with improved modern appliances, and managed by an experienced host, supplies

board and lodging at moderate rates, while, if preferred, a cottage may be erected at no great cost. Finally, in addition to its merits as a winter resort, the wide-awake capitalist will find abundant openings for profitable investment.

CORRESPONDENCE.

TREATMENT OF CANCER BY MEANS OF CAUSTICS.

In reply to a letter concerning the treatment of cancer by means of caustics, the editor would state that one of the best preparations is Esmarch's powder, which consists of 1 part each of arsenious acid and sulphate of morphine, 8 parts of calomel, and 48 parts of powdered gum acacia. Arsenic is also made into a paste by mixing with an equal quantity of powdered gum acacia and enough water to make a soft paste. It is not safe to apply a preparation containing arsenic to the mucous membrane, or, upon the skin, to a surface exceeding two or three square inches. Caustic potash, also, has been largely employed, either in the solid form or as a strong solution, afterward mopping the surface with dilute acetic acid, in order to neutralize any excess of the alkali. Many other caustics have been proposed, as, pyrogallic acid, ethylate of sodium, etc.

The editor has no knowledge of the preparation to which his correspondent alludes.

In answer to a letter from Dr. A. M. Vail, of Rock Rapids, Iowa, the editor would state that the bichromate of potash in large doses is a gastro-intestinal irritant or corrosive poison, according to the amount ingested. Its solution has been locally applied for the same purposes for which chromic acid is used, viz., corns, warts, or mucous patches. It has never come into general use as a general remedy, but has been given in chronic rheumatism and syphilis.

MEMBERSHIP in the American Pharmaceutical Association is obtained only by election at the annual meeting. "Every pharmacist and druggist of good moral and professional standing, whether in business on his own account, retired from business, or employed by another; and those teachers of pharmacy, chemistry, and botany, who may be specially interested in pharmacy and materia medica," are eligible for membership. For blank applications and further information, address Dr. H. M. Whelpley, 2729 Washington Avenue, St. Louis, Mo., Chairman of Committee on Membership.

MEDICAL NEWS AND MISCELLANY.

DR. B. E. HADRA has resumed his practice in Galveston.

DR. MAX DALSTROM, of this city, died suddenly last month.

THE physician of the Shah of Persia recently died, aged 71 years.

THE German Society of Public Health will hold its next meeting at Würzburg, on September 20, 1892.

SURGEON W. H. LONG, of the United States Marine-Hospital Service, died in Cincinnati on January 5th.

DR. JOSEPH A. CRAMP has been appointed Vaccine Physician of the Twenty-first District of Philadelphia.

PROF. P. PARISOT, of Nancy, succeeds Professor Schmitt in the editorship of the Revue Médicale de l'Est.

THE Practitioners' Club, of Chicago, entertained Dr. Victor C. Vaughn, last Monday, at the Palmer House.

THE German Emperor has conferred the Order of the Red Eagle, Second Class, on Professor Thiersch, of Leipzig.

DR. GEO. F. HULBERT has been elected Professor of Gynæcology in the St. Louis College of Physicians and Surgeons.

THE Gazette Hebdomadaire des Sciences de Montpellier and Le Montpellier Médical have been fused into one journal.

DR. JESUS MARIA ARGNETA, of the Mexican National Congress, visited, last month, many of the hospitals in Philadelphia.

DR. ROLLAND C. HODGES has been appointed Professor of Ophthalmology in the Medical Department of the University of Texas.

PROF. JOSEPH L. BAUER, of St. Louis, Mo., reports, in the Weekly Medical Review, a case of chancroid of the anterior vaginal vault.

DR. WILHELM KRAUSE, who has been Extraordinary Professor of Anatomy in the University of Göttingen for thirty years, has resigned his chair.

THE fourteenth meeting of the Balneological Congress will be held at Berlin in March (10th to 13th), 1892, under the presidency of Prof. Oscar Liebreich.

THE Board of Health of Philadelphia will petition Congress to establish one or more stations in the country for the sequestration and treatment of leprosy.

Dr. Klein, F.R.S., has resigned as Professor of Bacteriology of the College of State Medicine (England), and has been succeeded by Dr. Allan Macfayden.

Dr. Elmer E. Horn, of Austin, Potter County, Pa., was married, December 5, 1891, at Salladasburg, Pa., to Lulu, eldest daughter of C. W. Williamson, Esq.

Dr. R. B. Granger, of the well-known publishers, D. Appleton & Co., New York, in passing through our city, some weeks ago, called upon the editor.

On December 30, 1891, Dr. Paul Thornton, of Boston, was married, in Washington, D. C., to Miss Rachel, youngest daughter of the late General Sherman.

A new journal, devoted to anatomy and embryology, is entitled Anatomische Hefte, and is edited by Profs. Fr. Merkel, of Göttingen, and R. Bonnet, of Giessen.

Dr. Walter Ziegler, of North Seventeenth Street, a Director of the Twenty-ninth Sectional School Board, has lately suffered from a severe attack of pneumonia.

Dr. A. C. Bernays has resigned from the St. Louis College of Physicians and Surgeons to accept a part of the Chair of Surgery in the Marion-Sims College of Medicine.

Dr. John H. Rauch, of Chicago, who has been on a visit East, spent some days in Philadelphia last month, seeing old friends and looking up matters of public health.

It is announced that the Lippincott Company, of this city, will publish the International Medical Magazine, which will appear monthly, and include a department on legal medicine.

A Chair of Otology has recently been established in the Czech University of Prague, to which Dr. Kaufmann—until recently *Privatdocent* of that subject in the University—has been appointed.

The Gazzetta degli Ospitali, now entering on the thirteenth year of its existence, will, from the beginning of 1892, be published three times a week (Tuesday, Thursday, and Saturday) instead of twice a week, as heretofore.

Shot by a Patient.—Dr. W. W. Reeves, Superintendent of the State Asylum for the Insane, Austin, Texas, was shot and instantly killed, December 29, 1891, by Henry Purnell, son of ex-United States Marshal Thomas Purnell.

The Philadelphia Academy of Surgery held its annual meeting at the College of Physicians on Monday evening, January 4, 1892. The address was delivered by Dr. Thomas G. Morton, who took as his subject, "Progress of Surgery in 1891."

Dr. Americus Enfield will, in a short time, open a sanitarium at Bedford, Pa., for the treatment, especially, of those addicted to drink or the use of narcotics. The institution has a fine, elevated situation, and will be supplied with all the appliances of a first-class hospital.

Dr. C. E. Bean, of St. Paul, has had gratifying results from the Shurley-Gibbes treatment for tuberculosis. He has had about 40 cases under observation, 6 of which, as representative, he reports, with sufficient detail, in a recent number of the Northwestern Lancet.

An ordinance has recently gone into effect in Berlin which will give the right of way to carriages of physicians driving through crowded streets. In order to distinguish doctors' carriages from others, the coachmen will wear white hats.

Dr. Nikolai Protopopow, of Charkow, a distinguished Russian bacteriologist, recently died, at the age of 33, in consequence of an inoculation with the virus of glanders, when he was investigating that disease in the Pasteur Institute, at Paris, some time previously.

Removal.—On January 15th, the Drevet Manufacturing Company, Charles Marchand, President, removed its factory from 10 West Fourth Street to 28 Prince Street, New York. This is the company which manufactures Marchand's well-known medicinal preparations,—glycozone, peroxide of hydrogen, atomizer, and ozonizer.

An association has recently been founded at Budapest, under the name of "Teleia," the object of which is to combat the evils of prostitution, to rescue its victims, and to establish and maintain a free dispensary for the treatment of poor patients suffering from venereal disease.

Dr. Alfred W. Wilmarth, of the Institute for Feeble-minded Children, at Elwyn, Delaware County, has been elected First Assistant Physician, vice Henry L. Sykes, resigned, to become Superintendent of the Episcopal Hospital. Dr. Lillian Welch, of the Female Department, has tendered her resignation.

A Physician Buried Alive.—It is reported from St. Petersburg that a physician at Proschovitsaks apparently died, and the body was interred. The grave being opened, a few hours later, it was found that the unfortunate man had been buried alive, and had subsequently died from suffocation.

We are grieved to announce the death of Dr. Henry Fraser Campbell, of Augusta, Ga., December 15, 1891, in the 68th year of his age. Dr. Campbell entered the profession in 1842, and obtained celebrity as a general surgeon and, of late years, a gynæcologist. He was well known in this city as an amiable, genial man. His writings

had carried his fame throughout the entire world.

DR. W. T. PECK, of Davenport, Iowa, departed this life December 11, 1891, aged 50 years. He was the founder of the Medical Department of the University of Iowa, and Dean of its faculty. Dr. Peck was a capable surgeon, an excellent teacher, and a prominent member of the American Medical Association.

MR. GEORGE T. LEVAN, a student of the Medico-Chirurgical College, in the course of his dissections in the anatomical rooms, recently met with the following anomaly: Upon the right side of a well-developed male subject an accessory muscle was joined to the sterno-mastoid. At the second rib it was tendinous and thin, becoming broader and fleshy below, and being attached to the fifth and sixth ribs by tendinous fibres.

FATAL PURPURA HÆMORRHAGICA AFTER LABOR.—Sarchi (Nouv. Arch. d'Obstét et de Gynéc., September, 1891, Supplement, p. 424) reports a case where a 6 para, aged 27, lost consciousness two hours after delivery. Four hours later her whole body was covered with ecchymoses, each of the size of a pin's head, or larger, especially on the extremities. Five hours after delivery the patient died of hemiplegia.

A SAD MISTAKE.—A writer in the Hospital Gazette quotes the following story, said to have been related of Sir Richard Quain, M.D., which perhaps points a moral. He was attending the wife of an old patient, and at one of his visits the husband set him thinking by saying to the doctor: "I greatly appreciate the anxiety you feel for my poor wife, but do not let her see it again, for after you left the room she asked if you were the undertaker." As Dr. Quain rather prided himself on having a good bedside manner, he felt that he was taken down a peg or two.

MELANCHOLY DEATH OF A FRENCH PHYSICIAN.—Dr. Pons, of Nîmes, aged 69 years, was recently burned to death. He was in the habit of reading after going to bed. A half-hour after the departure of his housekeeper, neighbors heard cries issuing from his room, and, entering, found the doctor stretched upon the floor. A woman, seeking to raise the body and place it upon the bed, was shocked to find a detached arm in her grasp, and fainted from emotion.

BEGINNING with January 1, 1892, the management of the Revue de Laryngologie, d'Otologie, et de Rhinologie, founded and published by Dr. E. J. Moure,—an admirable journal,—will receive added efficiency by the labors of an editorial committee composed of MM. Charazac, of Toulouse; C. Miot, of Paris; Noquet, of Lille; Patiquet, of Paris; Wagnier, of Lille; and Dr. Beausoleil, as secretary of the editorial department. Dr. Louis Rousseaux, of Brussels, will furnish abstracts of works appearing in Belgium upon the special subjects represented by the journal.

BOOK ANNOUNCEMENTS.—J. B. Flint & Co., New York, have in press, and ready early in the current year, the following books:—

A complete system of "Gynæcology and Obstetrics," with 869 new illustrations, based upon translations from the French of Pozzi, Auvard, and others; revised by Chas. Jewett, M.D.; bound in leather or half-morocco, $8.00.

Flint's condensed complete "Encyclopædia of Medicine and Surgery." Arranged upon a new system, and embodying the various methods of treatment employed by eminent practitioners. The most valuable and complete work of this nature ever published. The result of a year's labor of a large corps of writers. Leather or half-morocco, two volumes, $8.00 per volume. The above works sold by subscription.

Also in press, ready March 1st, the "Electro-Therapeutics of Gynæcology," by Augustin H. Goelet, M.D.; cloth bound, $2.50.

THERE was a gathering of peculiar interest on Wednesday evening, December 2, 1891, at the Maison Matatia, Cairo, where Dr. Grant Bey assembled a number of his friends to hear one of his valuable Egyptological papers. The Museum was exhibited, and a lecture read on the later periods of Egyptian history. Mr. Halliburton, Q. C., subsequently delivered a brief address on the "Dwarfs of the Atlas" It will be fresh in the memory of our readers that Mr. Halliburton recently read a striking paper on this subject before the London Congress of Orientalists. The conjectures as to the locality of the mysterious land of Punt and the river Hiddekel, one of the four rivers which surrounded the Paradise of Genesis, were eminently original and suggestive, but the audience was disappointed that, owing to his late arrival, his valuable contribution to the *séance* was cut short.—*Cairo paper.*

A PROPHYLACTIC AGAINST INFLUENZA.—On this subject, Dr. Charles E. Sajous thus writes in the Satellite, January, 1892:—

The nature of the affection, the marked debility induced by it, and its sequelæ, all point to a remarkable depression of the general system.

The value of coca, as a tonic to antagonize any tendency to adynamia, is too well known to require elaboration here. Its therapeutical effects tend to build up precisely what influenza tends to destroy. This remarkable tonic action of coca in medical therapeutics has further been attested by Brown-Séquard, Dujardin-Beaumetz, Ball, Bouchut, A. McLane Hamilton, A. E. Macdonald, H. M. Lyman, I. N. Danforth, P. S. Conner, and many other eminent physicians,

too numerous to mention in the space at our disposal.

The coca-wine made by Mr. Mariani, of Paris, and termed Vin Mariani, is a preparation based on a scientific study of the individual virtues of the several varieties of the plant, conducted with a view to extract from them the most potent components, giving rise to tonic effect. The wine employed as an excipient is also selected with the same idea in mind, its fineness and purity giving the Vin Mariani the agreeable aroma which is peculiar to it. It is not only indicated as a prophylactic against influenza by the strongest inferences of experimental therapeutics, but its use meets the approval of pure common sense. A wineglassful should be administered three times a day after meals, or about half an hour before each meal.

Dr. Thomas Linn, formerly of this city, is practicing medicine during the winter at 16 Quai Massena, Nice, France, and in the summer at Aix-les-Bains.

The Society of Hypnology of Paris, founded in 1889 for the study of the clinical, medico-legal, and psychological applications of hypnotism, has just received from Dr. Liébeault, of Nancy, a sum of 800 francs. This donation is intended as a prize for a work which shall be presented to the Society upon a subject relating to hypnotism or physiological psychology.

Destruction of an Asylum by Fire.—On the evening of November 5, 1891, the Insane Asylum at Saint-Venant (France) was totally destroyed by fire. Its inmates were aged people and young idiots and epileptics of both sexes. The patients, 137 in number, were fortunately all saved, though not without great difficulty. The cause of the conflagration could not be discovered.

Death of Dr. Ernest Bouchut. — Dr. Bouchut, Professeur Agrégé of the Medical Faculty of Paris, and honorary physician of the hospitals, died in the latter part of November, 1891. He was born in Paris on May 16, 1818; was interne in 1838, gold medallist in 1842, doctor in August, 1843, laureate of the faculty in 1843 and 1844; appointed, in 1850, physician to the hospitals, after a service as *chef-de-clinique* at the Hôtel Dieu, and agrégé in 1853. He served first in Saint-Eugénie, and was transferred to the Hôspital des Enfants-Malades in 1872, where he remained until his retirement. Bouchut was Commander of the Legion of Honor, and physician-in-chief to the educational institutions of the Legion. He had devoted himself especially to clinical instruction. He had also been a journalist, and had directed, until the approach of the malady from which he died, Le Paris Médicale, now joined with La France Médicale. Among his chief publications were: A treatise on "Diseases of the Newborn, Nurslings, and Children" (1845); a treatise on "General Pathology and Semeiology" (1857); a "Dictionary of Medicine and Therapeutics," in collaboration with M. Despiès (1865); "Hygiene of Early Childhood" (1865), etc.—*Le Progrès Médicale.*

Death of Dr. John A. Thacker.—We learn with sorrow that one of our editorial fraternity departed this life on December 19, 1891, at the age of 59 years. Dr. Thacker was the editor, proprietor, and founder of our esteemed contemporary, the Cincinnati Medical News. He was born at Goshen, Ohio, January 1, 1833, educated at Wittenberg College and the Miami Medical College, graduating in medicine in 1856. He was Professor of Psychology at the Cincinnati College of Medicine and Surgery from 1863 to 1872, when he was transferred to the Chair of Medicine in the same institution. This position he filled until 1878, when he resigned. Dr. Thacker was a Fellow of the American Academy of Medicine, and in 1879 was elected Fellow of the Royal Microscopical Society of England. He, with others, founded, in 1868, the Cincinnati Medical Repertory, the title of which was changed in 1872 to the Cincinnati Medical News. Of this journal Dr. Thacker was editor for twenty-four years. His aim was always to make his periodical the medium of useful information to its subscribers. An admirable scholar, an accomplished physician, a learned scientist, a lucid lecturer and able writer, the death of Dr. Thacker is a loss to medical journalism in the United States.

Dr. E. C. Spencer, of St. Paul, Minn., a practitioner of unusual attainments and abilities, recently died, at the early age of 33. Dr. Spencer had served a number of years as assistant city physician.

The Deutsche Med. Zeitung for December, 1891, contains an abstract of a paper by A. Czerny, of Professor Epstein's Clinic for Children in Prague, describing a case in which acute endocarditis, followed by extreme dilatation of the heart, developed fifteen days after circumcision had been performed, the child being two weeks old at the date of operation. The writer attributes the disease to a septic process.

International Dermatological Congress. —The Second International Congress of Dermatology will be held at Vienna, from September 5th to 10th, 1892. Professor Kaposi is President of the Organizing Committee. The following subjects are proposed for discussion: The "Lymphatic Diseases of the Skin, from the Anatomico-Pathological Point of View," to be introduced by Dr. R. Paltauf, of Vienna; the

"Present Condition of Leprosy in Europe," by Drs. Arning, of Hamburg, and Petersen, of St. Petersburg; "Dermatomycoses, with Special Reference to the State of Affairs in France," by Dr. Feulard, of Paris; "Late Syphilis," by Professor Neumann; "Anatomy and Development of Epidermic Pigment," by Professor Jarisch, of Innsbruck; "Psorospermosis," by Professors Neisser, of Breslau, and C. Boeck, of Christiania; "The Principles of the Treatment of Gonorrhœa," by Professor Neisser; "Lupus Erythematosus," by Mr. Malcolm Morris, of London, and Dr. Th. Veiel, of Canstatt. Addresses will also be delivered by Drs. Besnier and Fournier, of Paris; Pick, of Prague; Doutrelepont, of Bonn; Schwimmer, of Budapest; and Riehl, of Vienna. In connection with the Congress, there will be an Exhibition illustrative of the pathology and treatment of skin diseases and syphilis. Communications relative to the exhibition should be addressed to Dr. Hans Heger, I, Stefansplatz, 8A, Vienna. The General Secretary of the Congress is Docent Dr. G. Riehl, 1-20, Bellariastrasse 12, Vienna.

CHARLES MEIGS WILSON, M.D.—Dr. Charles Meigs Wilson, the third son of the late Elwood Wilson, M.D., died, December 29, 1891, at Knoxville, Tenn., where he had been living since October, 1890. Dr. Wilson was born in this city, July 29, 1860. After having received a general education, he studied medicine at the Jefferson Medical College, from which he graduated in 1883. He was appointed Surgeon-in-charge of the Philadelphia Lying-in Charity. The establishment of the present hospital upon the site of the old Nurses' Home was, it is stated, largely due to his efforts. There he remained from 1885 until his resignation, in October, 1890, when he accepted the Chair for Diseases of Women and Children at the Tennessee Medical College, at Knoxville.

THE "Class of '78," Jefferson Medical College, held its fourth annual banquet at the Hotel Bellevue, December 29, 1891. The invited guests were Professors Da Costa and Pancoast, the two living professors of the Faculty of 1878, and Dr. T. H. Andrews. Dr. L. Webster Fox, Class President, was in the chair. Among those present were Drs. Frantz, Arney, Daniel E. Hughes, A. H. Hulsbizer, J. Moore Campbell, T. E. Conard, M. John Cummings, John C. Da Costa, Nevin B. Shade, Lambert Ott, Harry Bruns, H. Howard Drake, J. A. Wamsley, H. Page Hough, Fred. A. Oliver, and J. W. Lampsel.

SUICIDE ON ACCOUNT OF A BROTHER'S DEATH.—Dr. D. H. Parker, a prominent physician of Cairo, Ill., and well known in that section, killed himself, at 4 o'clock, December 8, 1891, in his room, by shooting himself, with a pistol, through the heart. His brother, Dr. George G. Parker, died in Chicago a short time since. Dr. Herbert, as he was familiarly known, was in constant attendance at the bedside of his brother. When he returned home, it was noticed by his friends that he was a changed man. It is said he hinted at suicide to a friend. It is supposed that the death of his brother, for whom he felt a strong attachment, temporarily unbalanced his mind. He was a native of Ohio, and was 42 years of age.

A PORTUGUESE LADY DOCTOR.—Senhora A. Cardia has just taken her degree at the Medico-Chirurgical School of Medicine of Lisbon. Her thesis, which was on hysteria, was dedicated to Queen Amelia. Senhora Cardia is the first lady who has been admitted to the medical profession in Portugal.

THE Second Cuban Medical Congress convened in Havana last month. The President was Dr. Juan Santos Fernandez. The Congress was organized two years ago, under very auspicious circumstances.

DR. WILLIAM F. HUTCHINSON, of Providence, R. I., and a member of the staff of associate editors of the New England Medical Monthly, has been elected an honorary member of the Vermont State Medical Society.

DR. J. B. S. HOLMES, of Rome, Ga., has associated with him, at his sanitarium, Dr. W. E. B. Davis, recently of Birmingham, Ala. Dr. Davis is President of the Tri-State Medical Society of Alabama, Georgia, and Tennessee; Secretary of the Southern Surgical and Gynæcological Society; and Vice-President of the American Medical Association.

THE friends of the late Prof. Dr. von Volkmann, the great surgeon of the University of Halle, have been easily successful in collecting money for the erection of a monument to the distinguished and learned man. An order therefor has been given to a sculptor in Rome. The statue will stand in front of the main building of the University which he helped to make famous.

AMERICAN NATURALISTS.—The American Society of Naturalists held its tenth annual meeting at the Academy of Natural Sciences, Nineteenth and Race Streets, Philadelphia, on December 29th and 30th, commencing at 2 P.M. on Wednesday, the 29th. The Society is composed of persons professionally or otherwise engaged in natural-history researches, and physicians. The first day's session was devoted to business, the president's address, and the reading of papers. On the second day Professors Baur, Heilprin, and J. A. Lee made reports on the different scientific exhibitions with which they have been connected during the year. The

topics for discussion were led by Thomas Meehan, on the study of plants; Prof. J. P. McMurrich, on the study of vertebrates; Prof. E. D. Cope, on the study of fossil forms; and Dr. J. A. Allen, on the study of recent vertebrates. The Art Club was thrown open to members of the Society during their stay. The Reception Committee was composed of Prof. Harrison Allen, Prof. Benjamin Sharp, and Dr. L. Webster Fox.

WILLIAM L. DUNGLISON DIES AT SOUTH BETHLEHEM.—William L. Dunglison, the son of the late Dr. Robley Dunglison, who was for a number of years Dean of the Jefferson Medical College of this city, died at his home, in South Bethlehem, of pneumonia, December 18, 1891, at the age of 59 years. Mr. Dunglison was born in Virginia.

DR. DAVID CERNA, of the University of Pennsylvania, has been presented with an honorary diploma, which makes him a Corresponding Fellow of the "Sociedad Espanola de Higiene," of Madrid.

DR. CHARCOT was prostrated with a severe attack of influenza.

IN the current number of the Lancet, Dr. Sang records a case of fatal poisoning by Epsom salts. A woman of about 35 years of age, having obtained "twopennyworth of salts," emptied the packet, containing 4 ounces, into a tumbler, added sufficient hot water to nearly dissolve the salts, and drank the whole. When Dr. Sang was called in, shortly afterward, he found the woman suffering from a burning pain in the stomach, difficulty of breathing, and a sense of loss of power in the limbs, but there was no vomiting or purging. An emetic of 30 grains of zinc sulphate failed to act, and, before a stomach-tube could be obtained, the patient fell into a collapse, followed by death about one hour and a quarter after taking the salts.

DR. N. SHERMAN LODER.—Dr. N. Sherman Loder, of 736 South Tenth Street, who died lately, on his twenty-seventh birthday, from an attack of the *grippe*, complicated with lung and heart troubles, was a young man of much promise. He was born in Monroe County, but was educated in this city, at the High School, and in 1884 graduated at the Jefferson Medical College. After special study for five years, meantime learning pharmacy with his brother Constantine, and assisting another brother, Dr. Percival E. Loder, he went abroad, visiting and inspecting the Berlin hospitals. He returned to this city in 1890, and was building up a fine practice, when he was taken with the illness which subsequently proved fatal.

IN many parts of Eastern United States, a small Mexican weed, belonging to the order of Compositæ, called *Galinsoga parviflora*, is now extremely plentiful, says Meehan's Monthly. It is also making headway in the Old World. The foliage has a resemblance to the ageratum, well known in gardens. The flowers are very small, the disk being yellow, and has five small ray-petals. It is strange to find a tropical plant thriving well so far north. It is destroyed by the first white frost, but, as the seeds are not injured by the extremest cold, the plant is able to maintain its existence wherever it is able to mature its seed in summer-time.

It is for this reason that so many other tropical weeds, such as the Jamestown weed, or stramonium, is able to extend itself. This is another tropical weed. The balsam, *Impatiens fulva*, although spread over the whole North American Continent, even penetrating the arctic circle, was no doubt originally a tropical plant, extending in the same manner as those we have referred to. Destroyed, as they are, very easily by frost, the seeds yet enable them to travel far into northern regions.

THE LAWS OF HEREDITY.—She came into the doctor's office, with her darling little dog in her arms.

"Oh, Doctor!" she exclaimed, sinking into a chair.

"What is it, my dear madam?" exclaimed the doctor, excitedly.

"Oh, Doctor," she wailed; "all of our family have weak lungs, and poor little Fido coughed four times this morning. Can you do anything for him?"—*Detroit Free Fress.*

IT is proposed to establish a school of the hygiene of trades and occupations at Zurich. The school will be provided with laboratories and all the necessary equipment for efficient teaching.

CHARITY AT HOME.—A Boston physician thinks that humane people who are so fond of raising funds for the unfortunate in foreign lands might more wisely do something for the consumptives of their own country. In New England there are at least 15,000 consumptives, half of whom might be benefited if they could afford to live in another climate. And the same thing is true of the whole region, which he calls the "consumptive belt." He thinks that all consumptives ought to go to New Mexico, where consumption is altogether unknown among the natives, and he calls on the churches to start a consumptive emigration movement to that Territory.—*New York Tribune.*

DR. FREDERICK BEDFORD, son of the late Dr. Gunning S. Bedford, one of the founders of the Medical Department in the New York University, died, December 28, 1891, in New York City.

THE American Public Health Association will meet next year in the City of Mexico, under the presidency of Dr. Felix Formento. On motion of Dr. H. B. Baker, it was resolved to meet in 1893 in Chicago, in the hope of making the meeting an International Congress of Hygiene and Public Health.

THE friends of Dr. J. McFadden Gaston are pleased at his having received the well-bestowed honor of being elected President, for the ensuing year, of the Southern Surgical and Gynæcological Association at its recent meeting in Richmond, Va.

Dr. George Ben. Johnston, of Richmond, Va., was elected Vice-President of the same Association. Dr. Johnston, who is a nephew of that distinguished soldier, Gen. Joseph E. Johnston, is one of the most genial and accomplished men of the South, and it was a fitting recognition of his ability to place him high on the list of officers of this excellent Association.

DR. GIDEON S. PALMER, M.D.—Dr. Gideon S. Palmer died at his home, 1113 Massachusetts Avenue, Washington, D. C., December 8th, in his 69th year. Dr. Palmer's illness was of protracted duration, and his death was not unexpected.

Dr. Palmer was born in Gardiner, Me, June 14, 1813. When a young man he taught the Lyceum at Gardiner, and fitted himself for college. He graduated from Bowdoin College, Maine, in the class of 1838, and afterward studied medicine in Philadelphia. He served his native city as councilman, alderman, representative in the State Legislature, where he was associated with Secretary Blaine. At the beginning of the late war he enlisted as a volunteer surgeon, serving as brigade surgeon on Gen. O. O. Howard's staff in the Army of the Potomac. He was in charge of Lincoln Hospital, of a hospital at Annapolis, and retired with the rank of brevet lieutenant-colonel.

In 1869, at the request of General Howard, Dr. Palmer took the Chair of Physiology and Hygiene in the medical department of Howard University. He was for many years dean of the university faculty, and surgeon-in-charge of the Freedman's Hospital. He leaves a widow and son, who were with him at the time of his death.

DR. KING, superintendent of the Botanical Gardens, Calcutta, has received a diamond ring, presented by the Emperor of Russia for services rendered to the Botanical Gardens at St. Petersburg.

AT the last meeting of the Board of Directors of the New York Post-Graduate Medical School and Hospital, J. West Roosevelt, M.D., was unanimously elected Professor of Clinical Medicine.

A VENEREAL CONGRESS.—A project is now under discussion by different boards of the Paris municipal government to establish an International Congress to consider questions connected with prostitution and the limitation of venereal diseases. It is proposed to hold the Congress in Paris, in 1893, and to invite medical men, lawyers, sanitary officials, and political economists.

BERLIN police authorities are trying to devise a method for the more thorough cleansing of beer-glasses in restaurants. The city health physicians say that disease is spread by the glasses washed as they are at present.

DR. ROBT. ALEXANDER KINLOCH, of Charleston, S. C., died, December 23d, in his 66th year. He was the professor of surgery, as well as dean of faculty, in the Medical College, ex-president of the Medical Society of South Carolina, formerly vice-president of the American Medical Association, and first surgeon to the Roper Hospital on Queen Street. He was at one time editor of the Charleston Medical Journal. During the war he served the Confederate forces as medical examiner, inspector of hospitals, and medical director of the Southeastern department. He was a contributor to the local periodicals and to the American Journal of Medical Sciences, chiefly on surgical and epidemiological subjects. He was an associate member of the Philadelphia College of Physicians. By birth, Dr. Kinlock inherited both Scottish and Welsh traits; by education he was cosmopolitan, having, besides his training at home and at the University of Pennsylvania, a considerable term of study in the hospitals of London, Edinburgh, and Paris.

THE vacancy of assistant surgeon at St. Thomas' Hospital, London, caused by the retirement of Mr. Craft, has been filled by the election of Mr. W. H. Baker, F.R.C.S., senior assistant-surgeon to the Royal Free Hospital.

ON November 5, 1891, the Nestor of the Berlin profession, Dr. M. Steinthal, now 93 years of age, celebrated the seventieth anniversary of his taking his doctor's degree. Many years ago he was president of the Hufeland Society; he was also the founder of the Berlin Medical Benevolent Fund.

ON November 6, 1891, Dr. Moritz Meyer, of Berlin, celebrated his 70th birthday. He was one of the first physicians in Germany who took up the subject of electro-therapeutics in a scientific spirit, and his writings have powerfully contributed to place that department of medical practice on a sound basis.

DR. CHAUNCEY D. PALMER reports, in the Ohio Medical Journal, a case of pyelo-nephritis which rapidly supervened upon an attack of gonorrhœa in the female, and proved fatal within a year.

DR. E. G. THOMAS, of Portland, Ore., is in Philadelphia, taking a post-graduate course.

A REFORM which removes one of the most shocking practices of the Dark Ages has just been brought about through a circular sent to all the Governors in Finland, declaring the auction of paupers and lunatics to be illegal. Up till now parishes have not had asylums and work-houses for the sick and aged; but every one who has, from one reason or other, had to live on the parish, has, once in every year, been sold at auction, and given to the bidder who has offered the lowest tender.

A NEW kind of porcelain, made from asbestos, has been brought before the Academie des Sciences, Paris, by M. Garros. He grinds the asbestos to a fine powder, and frees it from oxide of iron by sulphuric or hydrochloric acid, then makes it into a paste, molds it, dries it slowly, and finally bakes it for seventeen or eighteen hours, at a temperature of 1200° C. It is very translucent, and has been used successfully as a filter and sterilizer.

TRY a hot chestnut pudding. You will never get hold of anything more delicate: Boil two pounds of chestnuts till soft (two hours or more), dry them in the oven, remove the shell and skin, then pound the chestnuts. Mix with them 2 ounces of butter, 2 ounces of caster sugar, 2 or 3 eggs, and ½ pint of milk, and flavor with a little vanilla. Bake for two hours and a half.

DR. CHARLES S. TURNBULL last month placed a beautiful stained-glass window, representing Christ blessing little children, in Grace Episcopal Church, Mt. Airy, Philadelphia, as a memorial of his daughter.

BURLINGTON COUNTY (NEW JERSEY) MEDICAL SOCIETY.—At the annual meeting of the Burlington County Medical Society at Mount Holly, January 20th, Dr. N. Newlin Stokes was elected President; Dr. R. H. Parsons, Vice-President; Dr. A. W. Taylor, Secretary; Dr. E. Hollingshead, Treasurer; Dr. Burr McFarland, Censor; Dr. William Martin, Historian. Papers were read by Dr. Small and Dr. W. P. Melcher.

PHILADELPHIA COUNTY MEDICAL SOCIETY.—At the meeting of the Philadelphia County Medical Society, January 20th, in the hall of the College of Physicians, the following officers and delegates were elected for the ensuing year: Dr. John B. Roberts, President; Dr. de Forest Willard, First Vice-President; Dr. Charles H. Thomas, Second Vice-President; Dr. T. B. Schneideman, Secretary; Dr. John S. Stewart, Assistant Secretary; Dr. L. K. Baldwin, Treasurer. Delegates to the American Medical Association: Drs. Harrison Allen, J. M. Anders, B. F. Baer, J. M. Baldy, S. Thompson Banes, Henry Beates, Jr.; J. R. F. Bell, T. Hewson Bradford, Anna Broomall, Ross R. Bunting, Charles H. Burnett, R. Bruce Burns, Charles E. Cadwalader, W. M. Capp, R. A. Cleemann, R. G. Curtin, J. C. Da Costa, G. G. Davis, Chas. W. Dulles, G. B. Dunmire, T. H. Fenton, L. F. Flick, Wm. J. Gibson, Wm. Goodell, J. P. C. Griffith, John C. Hall, Hobart A. Hare, Frederick P. Henry, A. G. B. Hinkle, Edward Jackson, Wm. S. Janney, W. W. Keen, Benjamin Lee, Bernard R. Lee, H. D. McLean, Thos. J. Mays, Charles K. Mills, E. E. Montgomery, W. H. Morrison, T. S. K Morton, G. D. O'Farrell, M. O'Hara, W. H. Parrish, T. Parvin, F. M. Perkins, M. Price, A. B. Randall, John B. Roberts, Charles Schaffer, George E. de Schweinitz, Wm. S. Stewart, Charles H. Thomas, James B. Walker, Marie B. Werner, de F. Willard, James C. Wilson.

Delegates to the Medical Society of Pennsylvania were: Drs. J. Howe Adams, Lewis H, Adler, Jr.; E. F. Appeldorn, H. St. Clair Ash, L. K. Baldwin, T. Ridgway Barker, M. Imogene Bassette, Charles Bauer, H. F. Baxter, William H. Bennett, H. S. Bissey, A. A. Bliss, G. M, Boyd, Charles E. Bricker, H. W. Cattell, L. S. Clark, Charles Claxton, James Collins, R. B. Cruice, E. H. Curry, John B. Deaver, R. W. Deaver, A. H. de Young, Norton Downs, A. A. Eshner, W. N. Ferguson, Frank Fisher, Rebecca Fleisher, Henry F. Formad, Walter J. Freeman, Morris S. French, E. F. Garrett, Joseph S. Gibb, W. Constantine Goodell, George M. Gould, Andrew Graydon, Walter D. Green, D. F. Greenewald, R. H. Harte, W. J Henry, John C. Heisler, Robert Hess, Albert G. Heyl, Edmund W. Holmes, Oliver Hopkinson, A. H. Hulshizer, W. N. Johnson, R. N. Keely, P. D. Keyser, A. B. Kirkbride, Horace Ladd, Eugene Lamparter, Ernest Laplace, Samuel W. Latta, Joseph Leidy, Isaac Leopold, Morris J. Lewis, J. Hendrie Lloyd, Daniel Longaker, Louis F. Love, Fred. M. Luther, George McClellan, R. S. McCoombs, Clara Marshall, Howard B. Martin, John S. Miller, F. H. Milliken, James Mitchell, Elliston J. Morris, S. W. Morton, A. F. Müller, John H. Musser, T. R. Neilson, C. P. Noble, Charles A. Oliver, Frederick Packard, Howard A. Pardee, William E. Parke, Benjamin Pennebaker, McCluny Radcliffe, N. H. Raynor, O. P. Rex, Ida E. Richardson, S. D. Risley, John H. Roderer, W. V. Runkle, C. E. Sajous, D. MacCuen Smith, T. B. Schneideman, Charles B. Schoales, P. N. K. Schwenk, Charles Service, W. K. Shea, J. R. Shellenberger, J. B. Shober, Wharton Sinkler, H. A. Slocum, David D. Stewart, John S. Stewart, James F Stone, George Strawbridge, C. Styer, Harry B. Taylor, F. W. Thomas, Charles S. Turnbull, John B. Turner, A. W. Watson, J. William White, H. A. Wilson, L. Wolff.

DR. G. WHITEHEAD GILFILLAN, of Brooklyn, N. Y., is in Vienna, engaged in studying diseases of the eye and ear.

MR. W. B. SAUNDERS, of 913 Walnut Street, Philadelphia, announces that he has in preparation several works of exceptional value: (1) An American Text-Book of Surgery, by Profs. W W. Keen and J. William White, with such contributors as P. S. Conner, Frederic S. Dennis, C. B. Nancrede, Roswell Park, Lewis S. Pilcher, N. Senn, Francis J. Shepherd, Lewis A. Stimson, J. Collins Warren, William Thomson, and Charles H. Burnett; (2) a treatise on the Theory and Practice of Medicine by American Teachers, edited by Prof. William Pepper, among associate authors being Francis Delafield, Horatio C. Wood, James C. Wilson, William Osler, J. S. Billings, R. H. Fitz, James T. Whittaker; (3) a New Pronouncing Dictionary of Medicine, by Dr. John M. Keating and Henry Hamilton; (4) Diseases of the Eye, by G. E. de Schweinitz. M.D.

THE CAMDEN CITY DISPENSARY.—A very interesting address was delivered by Dr. H. Genet Taylor at the formal opening of the new building of the Camden City Dispensary, January 8th. After describing the original proposal of Dr. Othniel Hart Taylor to the Camden City Medical Society, on March 3, 1859, relative to the establishment of such a charity, the speaker traced the history of the movement, its inauguration in 1865, and its operation until the present time. In the service of the institution many members of the profession have received a valuable practical training. A new building being needed, the old dispensary property was, on March 12, 1890, sold to the West Jersey Title and Guarantee Company, for the sum of $4500, and the pharmacy was moved to 532 Market Street, temporarily, until a new building could be purchased or built. From Dr. Taylor's discourse we extract the account of the new dispensary building:—

"The new building is situated on Federal Street above Seventh, and has a frontage of 34 feet and a depth of 86 feet. It is built of brick, with Indiana limestone trimmings. The front part of the building is two stories in height, and contains, on the first floor, a reception-room for patients, an office for the Superintendent of the Relief Association, drug-rooms and surgery, besides which there is a wide hall in which is a staircase leading to the upper rooms. At the end of the hall is a large room about 28 feet square, which is used as a clinic.

"On the second floor is a library, which is a fine room, 21 feet wide by 42 feet long and 14 feet high, and connected with it is the lecture-room, of the same height and about 22 feet square. There are, also, on the same floor, toilet-rooms and lavatory, and in the rear a serving-room and pantry, with all the necessary fittings.

"In the rear of the main building there is a three-story house for the use of the custodian of the building. In the basement is located the heating apparatus and store-rooms, and also toilet-rooms for female patients. The building is so placed upon the lot, which is 40 feet wide, that an excellent side-light is obtained, and every care has been taken to insure proper lighting and ventilation of the different rooms in the building.

"The style of architecture is that of the *renaissance*, and the treatment throughout has been such as to give a quiet and dignified effect to the whole building.

"In the lecture-room and library, on the second floor, are large fire-places of brick, and one wall of the library has the lower part covered with shelves for books.

"The interior finish or wood-work of the building throughout is of pine, with the exception of the staircase and main-entrance doors, which are of oak. The whole of the interior work is stained and finished with a wax polish.

"The building has been completed in every particular, and will, probably, be large enough to fill the needs of the city for many years to come."

BOOK REVIEWS.

A Dictionary of Treatment, or Therapeutic Index. Including Medical and Surgical Therapeutics. By WM. WHITLA, M.D., Professor of Materia Medica and Therapeutics in the Queen's College, Belfast, etc., etc. Revised and adapted to the Pharmacopœia of the United States. Philadelphia: Lea Brothers & Co., 1892.

Successful authors, as a rule, produce successful works. The author of this practical and original dictionary of treatment, Dr. William Whitla, of Belfast, Ireland, has written a work on Materia Medica and Therapeutics that has passed through several successful editions. In truth, it is to-day one of the standard works upon these all-important subjects, and contains much original research by its author of great service to practitioners. The volume before us is a companion-book to the one referred to, and is the most complete therapeutic index, or index of diseases, now before the profession. Arranged as the diseases are, in an alphabetical way, they can be referred to quickly, and with great value to the reader. In considering each affection, Dr. Whitla has taken occasion to recount all the new agents that have been brought to the attention of the profession and have been found of the least use in the treatment of disease. In addition to the many drugs upon

which the author is especially well informed, from his practical experience, he has also made reference to many surgical operations that are of value in this or that disease. The long association and many consultations of the author with the late distinguished Professor Gordon, to whom this work is dedicated, has given Dr. Whitla an opportunity of writing and speaking with great force upon many surgical questions in relation to treatment. A glance at many of the diseases in which surgical interference becomes at times necessary—as in hypertrophy of the prostate gland—the author has certainly given judicial and good advice. We note with pleasure the many American authors that Dr. Whitla has referred to throughout this work, showing his keen perception upon the advances made here upon therapeutics and his careful observation upon this important department of medicine. The work is not only original, but abounds in therapeutic facts and prescriptions that will be of much use to teachers, physicians, and students.

Addresses, Papers, and Discussions in the Section of Otology and Laryngolygy, at the Forty-second Annual Meeting of the American Medical Association. Washington, D. C., May 5–8, 1891. Printed at the Office of the Association. Chicago, 1891.

The few papers upon this special department are very good, well prepared, and show the value of collecting them in book form for future use and reference.

Addresses, Papers, and Discussions in the Section of Materia Medica and Pharmacy, at the Forty-second Annual Meeting of the American Medical Association. Washington, D. C., May 5–8, 1891. Printed at the Office of the Association. Chicago, 1891.

The new section has certainly proved successful under the able management of its president, Dr. Frank Woodbury, judging, as we do, by the very practical and serviceable papers that have been arranged and bound in book form.

Addresses, Papers, and Discussions in the Section of Diseases of Children and Dermatology, at the Forty-second Annual Meeting of the American Medical Association. Washington, D. C., May 5–8, 1891. Printed at the Office of the Association. Chicago, 1891.

The papers that were presented before this section were very few in number,—from the size of this small book,—but they contain material that will be found of value to the reader.

Addresses, Papers, and Discussions in the Section of Oral and Dental Surgery, at the Forty-second Annual Meeting of the American Medical Association. Washington, D. C., May 5–8, 1891. Printed at the Office of the Association. Chicago, 1891.

This sectional work was not very rich in original papers, we regret to find from a reference to the small volume before us. We trust that at the next meeting of the Association, at Detroit, more of the special workers in this department will take an active interest in the section.

Thoughts in Verse and Prose. By HENRY C. COOPER, M.D., New York.

The author of this small volume has given the reader many most beautiful thoughts in both verse and prose. A very excellent poem is that on "A Good Name." It will greatly repay the reader to carefully read these lines, which contain beautiful expressions. "The Burning of the Brooklyn Theatre, December 5, 1876, being a Tragedy in Two Acts," is certainly very graphic and most interesting.

The Hydriatic Treatment of Typhoid Fever, According to Brand, Tripier and Bouveret, and Vogl. By CHR. SIHLER, M.D., PH.D., Professor of Histology in the Medical Department of the Western Reserve University, etc. Published by Chr. Sihler, 832 Scranton Avenue, Cleveland, Ohio, 1892.

The author has given the profession, in the volume before us, a most thorough account, in very few words, of the treatment of typhoid fever by this method. He carefully recounts the views and experience of the teachers and practitioners of Brand's method abroad. Dr. Sihler's opinions, translations, and the way he treats his subject are certainly very good. As a book of reference alone, the writings arranged in this volume will be of service to physicians.

Diseases of the Bladder and Prostate. By HAL. C. WYMAN, M.Sc., M.D., Professor of Surgery in the Michigan College of Medicine and Surgery, Detroit, etc., etc. Published by Geo. S. Davis, Detroit, Mich., 1891.

Dr. Wyman discusses diseases in this work that are of interest to all practitioners. He demonstrates his knowledge and skill as a surgeon in the brief but able advice given in the treatment of diseases of this portion of the body. The treatment of diseases, especially of the prostate, are carefully set forth, and the best recommendations from practical experience are given the reader. The work is well illustrated, ably written, and very practical and useful to both physicians and surgeons.

The Modern Treatment of Hip Disease. By C. F. STILLMAN, M.Sc., M.D. 118 pp. Price, paper, 25 cents; cloth, 50 cents. Physicians' Leisure Library, published by George S. Davis, Detroit, Mich., 1891.

The author of this work has long been known as a successful surgeon, who has devoted much

time and research upon diseases of the joints. He has given in the pages of this volume a very thorough understanding of the modern treatment of hip disease. The author has not only recommended good treatment for this class of cases, but has well and ably illustrated the various apparatus that may be required, as well as the proper adjustment of it.

Mental Suggestion. By DR. J. OCHOROWITZ, sometime Professor-Extraordinarius of Psychology and Natural Philosophy in the University of Lemberg. Four double numbers of the Humboldt Library. Price, $1.20. The Humboldt Publishing Co., 19 Astor Place, New York.

These volumes are devoted to the study of an obscure subject, which must be of peculiar interest to the physiologist and psychologist. The writer has given many years to the investigation of the topics of which he treats, and has prepared a work which is replete with information drawn from various sources. The phenomena of animal magnetism and hypnotism are differentiated, the former being considered by the author as the more worthy of scientific study.

The Medical Bulletin Visiting-List or Physicians' Call Record. Arranged upon an original and convenient monthly and weekly plan for the daily recording of professional visits. Philadelphia and London: F. A. Davis, 1892.

This is a particularly convenient book, inasmuch as but one entry of a patient's name is required during each month. Time is thus saved, both in entering and summing up accounts. It contains, moreover, much useful information in a form suitable for ready reference.

The Wild Rose of Gross-Stauffen. By NATALY VON ESCHSTRUTH. Translated by ELISE L. LATHROP. With photogravure illustrations.

Among recent works of fiction, "The Wild Rose" is pre-eminently the most imaginative, picturesque, and inspiring novel of the year. An air of purity and naturalness pervades this unconventional story, which appeals strangely to the soul's sympathies and affections, while the rare beauty and character of the young baroness—an only child, brought up at her father's estate, far from the city—exhibits a genuine manifestation of girlish innocence and *naïve* sweetness that fairly carries the reader with her. Although never sensational, the story is rich in social pictures, presenting many incidents of great interest,—especially the description of the court ball, to which our heroine was suddenly introduced, is wonderfully graphic. Altogether, the various characters are well drawn, and the plot and *dénouement* exceptionally interesting and novel. The book exhibits all the typographical beauty and daintiness that characterize the Worthington publications, and the charming illustrations add greatly to the enjoyment of the text. Price, half-rox., $1.25; paper, 75 cents. Worthington Co., 747 Broadway, New York.

CURRENT MEDICAL LITERATURE

A New Surgical Bag. By W. Van Lennep, A.M., M.D., Philadelphia.

A Consideration of Some of the Parts of a Microscope-Stand, of Interest to Pharmacists. By Dr. H. M Whelpley, F.R.M.S.

The Application of Sacral Resection to Gynæcological Work. By E. E. Montgomery, M.D., Philadelphia. Reprinted from Transactions, 1891.

Announcement of the U. S. Dental College, Chicago, Ill., 1891–92.

General Announcement of the Philadelphia Dental College and Hospital of Oral Surgery, Cherry, above Seventeenth Street, Philadelphia, Pa.

Possible Sterilization of City Water. By R. Meade Bache. Read before the American Philosophical Society, April 17, 1891.

The Post-Graduate: Supplementary Number, containing the Annual Announcement of the School, with a Catalogue of the Matriculates, and Report of the Dispensary and Hospital, New York City. 1890–91.

A Step Backwards: or, the Legal Control of Marriage. By J W. Carhart, M.D., C.M., D.D., Lampasas, Texas; Chairman Section on Obstetrics and Diseases of Children. Texas State Medical Association, 1891.

The Physician's Chief Wealth is in What He Gives, and Not in What He Gains. By J. W. Carhart, M.D., of Lampasas, Texas, Member of the American Medical Association, etc.

Nihilism in Medicine: An Address Delivered Before the Ulster County Medical Society, by the retiring President, June 2, 1891. By Clarence L. Dodge, M.D., Kingston, N. Y.

Ninth Annual Announcement of the Philadelphia Polyclinic and College for Graduates in Medicine, Session 1891–92.

One Thousand Cases of Labor, and Their Lessons. By G. W. H. Kemper, M.D., Member of the Delaware County (Ind.) Medical Society; Ex-President of the Indiana State Medical Society, Muncie, Ind.

A Course in Microscopical Technology for Colleges of Pharmacy. By Dr. H. M. Whelpley, St. Louis, Mo., Professor of Microscopy in the St. Louis College of Pharmacy, etc.

COMMERCIAL NEWS.

Electrical Apparatus.

Doctor, if you think of buying anything in the above line, it will pay you to write the Galvano-Faradic Manufacturing Company, 300 Fourth Avenue, N. Y., for one of their new Illustrated Catalogues,—free to the profession. The list of goods manufactured by this concern are thoroughly reliable in every respect, and they are highly recommended by their numerous patrons in all parts of United States and Canada.

Insomnia of Hysteria.

℞ Peacock's bromides, . . 4 oz.
Celerina [Rio], . . . 2 oz.

M. Sig.: Teaspoonful every two hours until sleep is produced.

The Rio Chemical Company, of St. Louis, if it had never done more than present to the profession its valuable Extract of Pinus Canadensis would have placed the profession under a lasting obligation to it. There is no more healthful, stimulating, and generally beneficial application that can be made to a diseased mucous membrane than this.

The Columbia Daily Calendar.

An old friend in a new dress, and an article that has come to be one of the indispensables of an editor's desk, comes to hand in the Columbia Daily Calendar for 1892. The Calendar is in the form of a pad containing 367 leaves, each $5\frac{1}{8}$ x $2\frac{5}{8}$ inches; and each slip bears a short paragraph pertaining to cycling or some kindred subject, and at the bottom of each leaf is a blank for memoranda. The stand is an entirely new departure, being made of sheet metal finished in ivory black, and very compact. This is the seventh issue of this now well-known Calendar, yet all the matter is fresh and new.

Terraline.

I have used Terraline in a case of chronic broncho-trachitis, and in one of enlarged glands on the base of the tongue, and benefit was derived from its use in each case; the former, through the systematic effect; in the latter, through its soothing and emollient effect directly upon the enlarged and swollen glands. In these cases it should command particular attention.

J. H. Claiborne,
10 East Twenty-eighth St., New York City.

Doctor: If you want the proceedings of the leading New York Medical Societies, the College and Hospital Clinics, and all the current medical news of that city, as well as a complete list of Medical, Dental, Pharmaceutical, Veterinary, and Scientific Journals, send $2 to Dr. Ferdinand King, P. O. Box 1209, New York, for The Doctor's Weekly, one year. It will pay you.

Rest for the Doctor.

The fact that Bass & Co., the famous English brewers, have placed their Imperial Malt Extract on this market cannot but prove a source of great satisfaction to the profession throughout the country, especially after the varied and various claims of the agents for the inferior Continental goods, of which the mass of the profession has become more than "tired." There is only *one* "Bass," and it is doubtful if there exists a physician of any prominence in America who has not at some time ordered the use of their high-grade malt products.

Aletris Cordial.

S. A. McMurray, M.D., Marion, Ohio, says:—

"I used Aletris Cordial, with very good results, in the case of Mrs. —, aged 23. Since the birth of her child, five years ago, she has been in a very poor state of health. At the time I saw her she was very much reduced. She also, since the birth of her child, had suffered with dysmenorrhœa of a most severe type, the pain beginning three or four days before the appearance of the menstrual flow and lasting until one or two days after, its appearance being so severe as to confine her to her bed. She was also very nervous, had not much appetite, and did not sleep well. I ordered 1 teaspoonful of Aletris Cordial, three times daily, beginning one week before the appearance of the menstrual flow and continuing for two weeks, then to discontinue its use until a week before the next period. In conjunction she also took 1 teaspoonful of Celerina, one hour after each meal, as I thought it would be beneficial on account of her nervous condition. I began to notice improvement in a short time, and at the next menstrual period there was little pain. From that time on there was marked improvement until, at the end of two months, she was free from pain at the catamenial periods. The nervous phenomena improved, as did also her appetite, until she is now, according to her statement made me yesterday, in better health than she has been for six years."

Dr. J. B. Mattison, member of the American Association for the Cure of Inebriates, of the New York Neurological Society, of the Medical Society of the County of Kings, Brooklyn, N. Y., has reported good results with Chloralamid at various times, and in an article on "Hypnal," in the New York Medical Record, January 3, 1891, says:—

"Following failure (with hypnal) 30 grains of Choralamid promptly brought slumber. Compared with the latter—which, *en passant*, I think the hypnotic—30 grains hypnal have less power than a like amount of Chloralamid. As an anodyne, sedative, or hypnotic, it is less effective than a combination of phenacetin and Chloralamid."